DOCUMENT RESUME

ED 065 127 LI 003 748

AUTHOR	Taylor, David W.; And Others
TITLE	An Operations Research Study of the Pacific Northwest Bibliographic Center: Final Report.
INSTITUTION	Washington State Library, Olympia.
SPONS AGENCY	Bureau of Libraries and Educational Technology (DHEW/OE), Washington, D. C.
BUREAU NO	BR-1-J-050
PUB DATE	Jun 72
GRANT	OEG-X-71-0049(057)
NOTE	115p.; (0 References)
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	*Bibliographic Citations; *Information Centers; *Information Services; Interlibrary Loans; Library Cooperation; Library Services; Operations Research; Reports; *University Libraries
IDENTIFIERS	*Pacific Northwest Bibliographic Center; PNBC

ABSTRACT

This report describes the operations of the Pacific Northwest Bibliographic Center (PNBC) which is located at the University of Washington's Library in Seattle. The Center's Union Catalog contains bibliographic citations for 1,778,000 different titles held by 45 libraries in the Pacific Northwest. The Union Catalog is supplemented by microfilm files and several book catalogs, as well as the University of Washington Library's card catalog. These resources are estimated to describe and provide locations to approximately 2.75 million different titles. The filing and searching operations of PNBC are described in detail and costed. Flow-charts are provided. The characteristics of requests received, processed and those for which locations were not provided are described. PNBC's success rate in providing locations for requests is 83.11%. Of the requests forwarded by PNBC to potential lending libraries, 83.69% result in materials being delivered to the requesting library. A determination was made of the elapsed times for component elements in the sequence from a library requesting material, through processing within PNBC to the library receiving the material. Processing time within PNBC was found to be 13.01% of the total "turn-around" mean time of 19.75 days, and about 6% of the total mode time of 10.5 days. (Author)

ED 065127

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEH REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Final Report

Project No. 1-.1-050
Grant No OEG-X-71-0049(057)

An Operations Research Study Of The Pacific Northwest Bibliographic Center

David W. Taylor
Molly R. Mignon
Donald J. Grant

Washington State Library
Olympia, Washington 98504

June, 1972

The research reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not therefore, necessarily represent official Office of Education position or policy.

LI 003 748

U. S. Department of
Health, Education, and Welfare
Office of Education
Bureau of Libraries and Educational Technology

A B S T R A C T

This report describes the operations of the Pacific Northwest Bibliographic Center (PNBC) which is located at the University of Washington's Library in Seattle. The Center's Union Catalog contains bibliographic citations for 1,778,000 different titles held by 45 libraries in the Pacific Northwest. The Union Catalog is supplemented by microfilm files and several book catalogs, as well as the University of Washington Library's card catalog. These resources are estimated to describe and provide locations to approximately 2.75 million different titles.

The filing and searching operations of PNBC are described in detail and costed. Flow-charts are provided. The characteristics of requests received, processed and those for which locations were not provided are described. PNBC's success rate in providing locations for requests is 83.11%. Of the requests forwarded by PNBC to potential lending libraries, 83.69% result in materials being delivered to the requesting library.

A determination was made of the elapsed times for component elements in the sequence from a library requesting material, through processing within PNBC to the library receiving the material. Processing time within PNBC was found to be 13.01% of the total "turn-around" mean time of 19.75 days, and about 6% of the total mode time of 10.5 days.

P R E F A C E

This report is the end product of a study of the Pacific Northwest Bibliographic Center conducted from September 1971 through May 1972. The focus of the study was on the operations performed by the staff of PNBC.

We were fortunate that Molly R. Mignon, the Principal Investigator for the study, was a Center staff member serving as Head Reference Librarian. This allowed us, as the study proceeded, to immediately initiate the alterations in procedures indicated by the study's analyses. It was therefore possible to test and refine the operations during the period of the study itself.

This final report, rather than discussing how, when, and why changes in procedures were made, instead attempts to describe in detail the results of the study, i.e. how now, after these changes, the operations are conducted.

The Project Director for the study was David W. Taylor, Associate State Librarian, Planning and Research of the Washington State Library. Donald J. Grant, also of the State Library, served as Research Analyst.

The authors of this report wish to acknowledge the assistance provided by Lura Gibbons Currier, Director of the Pacific Northwest Bibliographic Center and the Center staff. The patience and courtesy exhibited by the staff, despite the pressures of a heavy work load, were at all times exemplary.

We wish to extend our thanks also to Barbara Calquhoun and other members of the clerical staff at the Washington State Library, who assisted in the preparation of the final report.

LIST OF EXHIBITS

		PAGE
Exhibit I-1	Pacific Northwest Bibliographic Center--Floor Plan	2
Exhibit II-1	Age of Main Entries in PNBC's Union Catalog	12
Exhibit II-2	Number of Locations Per Title	13
Exhibit II-3	Locations (Titles) Recorded at PNBC	14
Exhibit II-4	Libraries Holding Unique Titles	15
Exhibit III-1	Interlibrary Loan Requests Received at PNBC, 1953 - 1972	17
Exhibit III-2	Libraries Placing Requests with PNBC	18
Exhibit III-3	Interlibrary Loan Requests Received-- By Type of Agency	20
Exhibit III-4	Interlibrary Loan Requests Received-- By By Library Type	21
Exhibit III-5	Interlibrary Loan Requests Received-- By Geographic Area	21
Exhibit III-6	Elapsed Time Between Date of Request and Receipt at PNBC	22
Exhibit III-7	Types of Materials Requested	23
Exhibit III-8	Imprint Dates of Items Requested	25
Exhibit IV-1	Flowchart of Searching Routines	28
Exhibit IV-2	Direct Labor Costs for Processing Requests	38
Exhibit V-1	Distribution of Requests Sent to Lending Libraries by PNBC	39
Exhibit V-2	Area Distribution of Requests from PNBC	40
Exhibit V-3	Elapsed Processing Time Within PNBC	41
Exhibit V-4	Characteristics of Problem Requests	42

		PAGE
Exhibit V-5	How Problem Request Locations Were Obtained	43
Exhibit V-6	Requests Received vs. Requests Without Northwest Locations	44
Exhibit V-7	Elapsed Time Between PNBC's Forwarding of Requests and the Arrival of Materials in the Requesting Library	45
Exhibit V-8	Reasons Stated for Non-Receipt of Materials	46
Exhibit VI-1	Main Entry Cards Received from Reporting Libraries, 1953-1972	47
Exhibit VI-2	Flowchart of Filing Routines	49
Exhibit VI-3	Direct Labor Costs for Filing Cards in PNBC's Union Catalog	53
Exhibit VII-1	Library Rankings of Suggested PNBC Services	57
Exhibit A-1	Libraries with Holdings Recorded in PNBC's Union Catalog	72
Exhibit A-2	Additional Holdings Records in PNBC Supplementing the Union Catalog and Microfilm Files	75
Exhibit A-3	Serials Lists to Which Pacific Northwest Libraries Contribute	79
Exhibit A-4	Libraries in the Region That Can Use Materials in Microform	80
Exhibit A-5	Libraries in the Region That Fill Interlibrary Loan Requests by Photocopy	84
Exhibit A-6	PNBC Operations Research Study--Library Questionnaire	88
Exhibit A-7	"PNBC Reporting..."	95
Exhibit A-8	Salaries and Benefits, Projected Costs--FY 1973	96
Exhibit A-9	PNBC Operating Costs--FY 1972 (Actual) and FY 1973 (Projected)	97

CHAPTER I

OVERVIEW AND BACKGROUND

The Pacific Northwest Bibliographic Center is located within the Henry Suzzallo Library at the University of Washington. It occupies about 2,900 square feet on the second floor in an area adjacent to the University Library's Interlibrary Loan Office.[1]

The Center employs 16.7 FTE personnel (Oct. 1, 1971) including 5 professional librarians, 4.5 sub-professional and/or clerical workers, and 7.2 FTE in student help. The operating budget for 1971-72 is $150,236. Grant funds from Washington and Montana state libraries and the U.S. Office of Education are providing an additional $42,201 for the current year, specifically designated for non-recurring projects and research. The basic operating funds are provided on a population percentage basis by each state with the plans for raising the several state' allotments left to each state. Where full support is provided, all libraries within a state are eligible to use PNBC. Provision is made for individual library subscriptions in British Columbia.

The Center is a registered non-profit corporation, incorporated by the state library agencies of the five states. It is governed by a Board of Directors comprising seven members: one from each of the five incorporating states, one from the Pacific Northwest Library Association, and one from the University of Washington.

The Center houses a union catalog of 2,308,000 cards which list the books and other printed materials owned by 45 libraries in the region covered by Alaska, Washington, Oregon, Idaho, Montana, and British Columbia.[2] In addition to the card catalog are files of microfilm and book

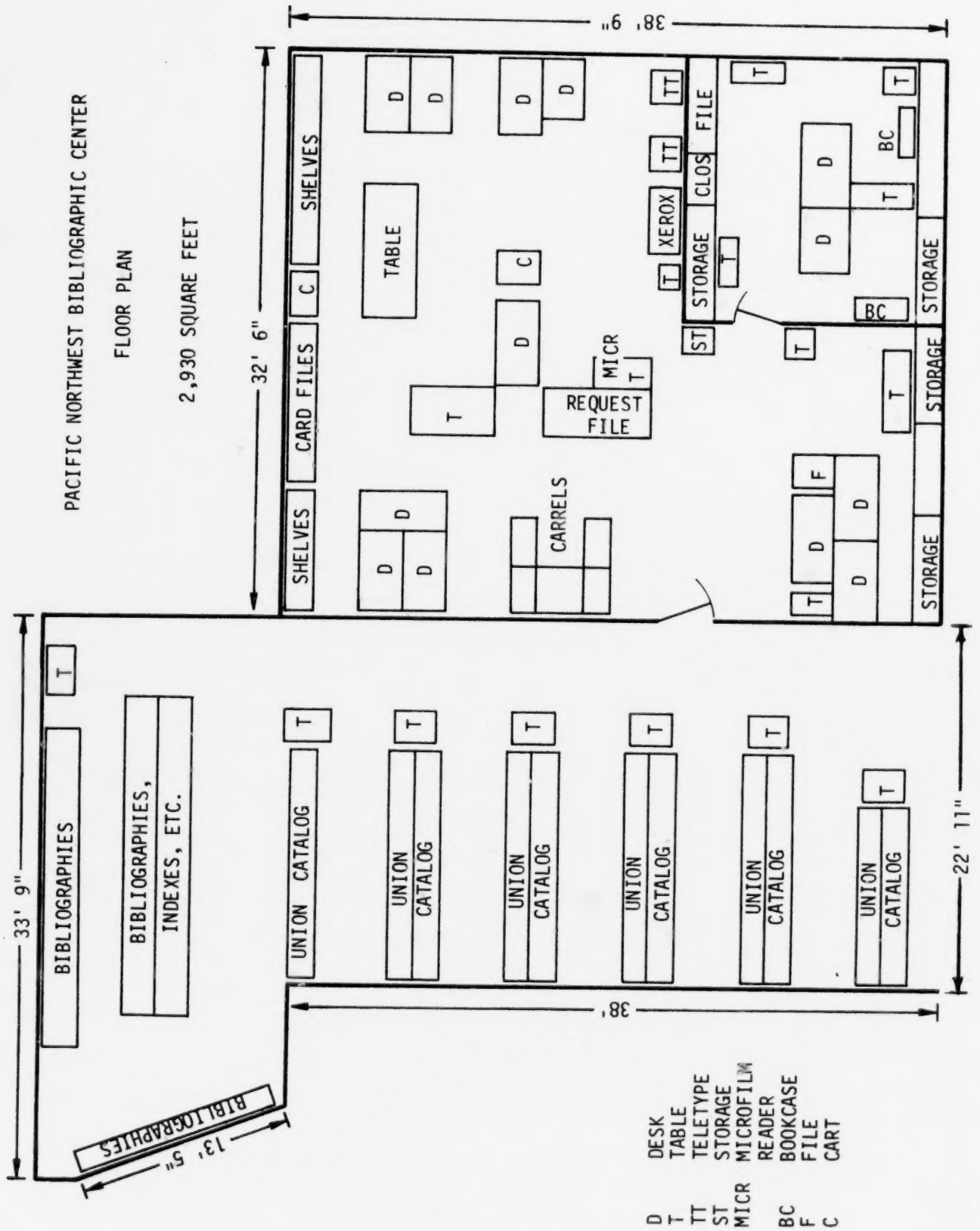
1. For floor plan see Exhibit I-1
2. For complete listing see Appendix Exhibit A-1

Exhibit I-1

PACIFIC NORTHWEST BIBLIOGRAPHIC CENTER

FLOOR PLAN

2,930 SQUARE FEET



catalogs containing the records of holdings of several other libraries. A collection of bibliographies, general catalogs, serials holdings lists and reference works are also used to identify and locate books and special collections.[3]

The staff of the Center locates books and other information materials for libraries and their users. If the title desired is not owned in the region, it extends its activities outside the region.

The staff arranges interlibrary loans by routing requests to the proper source, and by giving alternative locations for use if the first library asked is unable to fill the request. Ordinarily the selection of lending library is made by type of library (preferably the same as requesting library) and proximity to requestor, but individual loan policies and the desirability of spreading the load are also factors. The use of liberal interlibrary loan privileges makes the resources of the major research collections available to all.

As well as responding to requests for specific titles, the Center also directs those in search of materials on specific subjects to the collections best able to serve them. In addition, the Center occasionally assists librarians and library users in identifying authors, titles, editions and other matters of bibliographical research.

The Center was founded in 1940 with a grant from the Carnegie Corporation and has, since the expiration of that grant, been supported by the libraries of the region. Until 1970 support had been in the form of individual library subscriptions. Since the 1970 reorganization an effort is being made to shift total financial support to the state library agencies of the five states. This method of support makes the Center's services more readily available to all citizens of each state and provides equal access to the Center by each library regardless of its type or size.

3. See Appendix Exhibit A-2

Four of the states have devised methods of raising their "fair share" portion of the current budget but the problem of financing the Center in Oregon remains yet to be resolved.

The Center has always been located in the University of Washington Library at Seattle.

At the time of its establishment the Center "was conceived broadly as an agency of regional library cooperation, both to facilitate the collective exploitation of the existing resources of the region and to foster the future growth of these resources." [4]

A study of the Center by Raynard Swank published in 1957 described early efforts made toward these ends. "During the early years of the Center, this broad objective was pursued with vigor and imagination and with the enthusiastic support of the entire region. Indeed, before the Union Catalog and its related interlibrary loan services were well under way, the Center had begun to experiment boldly with other devices of library cooperation. Forays were made into the surveyal and description of regional resources, such as government documents, unpublished research materials, Northwestern Americana, and Latin American materials, and in 1943 Van Male's Resources of Pacific Northwest Libraries[5] was published. A bibliographic information service was offered to supply libraries of the region with data for acquisitional and cataloging purposes, the identification and comparison of editions, and the prevention of unnecessary duplication of acquisitions. To improve discounts, a joint purchase agreement between Pacific Northwest libraries and a major book jobber was attempted. A cooperative "last copy" program was adopted to prevent the discard of the titles unique to the region. An ambitious agreement

4. Swank, Raynard C. The Pacific Northwest Bibliographic Center. Pacific Northwest Library Association, 1957, p.2
5. Van Male, John. Resources of the Pacific Northwest Libraries; A Survey of Facilities for Study and Research. Pacific Northwest Library Association, 1943.

for regional library specialization was promoted to coordinate and integrate the development of library resources in the Pacific Northwest, to eliminate needless duplication and to build up within the region strong subject collections in fields of particular interest in the area. Throughout this period of hopeful pioneering, the services of the Center and its aspirations for the future were widely and effectively publicized by means of posters, articles, exhibits, field trips, and conference programs."[6]

Swank found it necessary to paint a dark picture of what happened to these early bright dreams of library cooperation on a regional scale.

"During succeeding years, however," he went on to say, "the vision gradually faded and the concept narrowed as one by one those early projects failed or receded into the background. Only the Union Catalog and interlibrary lending flourished.

Not only has the Center become primarily a clearinghouse for interlibrary loans; it is also now in danger of failing even at that, because of the large arrearages in the maintenance of the Union Catalog.[7]

Even though there were strong differences of opinion as to what PNBC should be, Swank found the profession on the whole unwilling to permit its demise.

"Many librarians of the region are satisfied that the Center should continue to concentrate on the Union Catalog and interlibrary lending, but others, while applauding the quality and value of these services, regret that other significant parts of the original program have not also flourished. The conviction persists that such a Center could, and should, contri-

6. Swank. p.3
7. Ibid

bute more profoundly in a wider variety of ways to the exploitation and enrichment of regional resources."[8]

Following the release of the full report of the Swank Survey, the Board of Managers of the Center set to work on implementing several of its recommendations, among which were:

"That the Board of Managers be replaced by a large Council to consist of representatives of the libraries that subscribe to the support of the Center and by an Executive Committee elected by and from the Council.

That the LC depository card catalog be discontinued.

That interlibrary loan services to the smaller public libraries continue to be diverted as much as possible from the Center to state library or other local agencies, and that the PNLA encourage the further development of such agencies in all states and provinces of the region.

That the University of Washington Library plan separate quarters for the Center as part of its building program, and that the Center's budget express all costs, including all the subsidies now provided by the Library.

That the income of the Center be increased and that attention be given to the following possible methods: (1) weighting the public library formula by states and provinces in order to reflect local differences in the demands upon the Center, or negotiating a special subscription from the Washington State Library; (2) raising the public library rates in relation to those of the academic; (3) revising upward the rates applied to Class B (income $5,000 to

8. Swank. Ibid

$25,000) libraries; (4) promoting additional subscriptions from all types of libraries, including special libraries; and (5) soliciting foundation grants."[9]

The Council, largely through its Executive Committee, began to determine policy for the Center. The LC depository function was assumed by the University. Emphasis for service to the smaller public libraries shifted to the states with the increasing strengths attained by the state library agencies through the Federal Library Services Act (later Library Services and Construction Act) which passed almost simultaneously with this Swank Recommendation. A new financial formula added some income to the Center, but several efforts to secure foundation grants were unsuccessful.

Both the momentum and the scope of library development were stepped-up throughout the Pacific Northwest when the principle of cooperation among different types of libraries was built into the Library Service and Consturction Act as its Title III. As each state began to build internal machinery for interlibrary cooperation it began, also, to examine the external structure under which it had participated in interlibrary cooperation on a regional basis for more than two decades. Late in 1968, PNBC Council asked the Washington State Library to conduct a study of the Center to determine its position in the various programs of library cooperation being developed under Title III of LSCA. Implementation of this resulted in the extensive survey made by Lura Gibbons Currier during 1969.[10]

Even before this lengthy report had reached its final printing, the

9. Swank, p.47
10. Currier, Lura Gibbons. Sharing Resources in the Pacific Northwest. Washington State Library, 1969.

officers of the Pacific Northwest Library Association began determining what specific action should be taken in regard to its recommendations.

In the discussions that followed, there was extensive involvement of the library community. Those examining the question of PNBC's future included the Executive Committee of the PNBC Council; the full Council in a meeting called especially for this purpose; the state librarians of the five states who later incorporated the Center; a regionwide ad-hoc committee of member-users of PNBC who were not on the Council, appointed by the President of PNLA; the Executive Board of PNLA; the membership of PNLA in attendance at the annual conference in Ashland, Oregon in August 1970.

To assure continuity in the changing concepts for PNBC which had been clearly expressed by the librarians of the region in these numerous deliberations and to capitalize on the fund of information gained in the work done to produce the 1968-69 study, the Board of Directors employed Lura Gibbons Currier, author of the survey, as the first Director of the Center under its new organizational structure. The Staff began immediately to carry out the mandate of the Board of Directors to implement the recommendations of the 1969 survey.

So similar are the service concepts and the managerial needs expressed by both Swank and Currier that what has happened to date is that the new structure, increased financing, and additional staff are making it possible to implement, at least to some degree, both these surveys even though their publication spans twelve years.

Fully implemented to date have been those recommendations dealing with basic structure, Board composition, increased budget, improved equipment, upgraded salary scale, and liberalized service policies. The Center has been incorporated under the laws of the State of Washington

as a non-profit corporation with the five state library agencies as incorporators. The membership of the Board of Directors is based on the concept of the Center as a service agency designed to supplement the all-over library service plan for each state. It carries out also the recommendation that PNLA divest itself of administrative responsibility for PNBC and rather that its influence, through its member on the Board of Directors, be exerted in the policy making aspects of the Center. The operating budget for the last year under the previous set-up had been $55,565.18; in 1970-71 it was increased to $97,173 and in 1971-72 to $150,236. This has allowed upgrading of salaries to a level communsurate with duties performed, and made possible the purchase of needed furniture, communications equipment and bibliographic tools. In addition it has allowed PNBC to offer the new service of filling requests for periodical articles by photocopy, and has enabled the Center to assume many of the costs involved in its operation that were formerly borne by the University of Washington. A liberalized policy has greatly expanded the range of materials now accepted by PNBC for search, with the result that requests are now processed for fiction, juvenile books, new imprints, music scores and recordings and other specialized material; and these services are available to all borrowers without restriction.

These changes have coincided with and perhaps stimulated a drastic increase in the number of requests received and in the holding records filed with the Center. The conduct of this operations research study, Sept. 1971 - May 1972, thus occurred at an opportune time.

CHAPTER II

BIBLIOGRAPHIC RESOURCES

The Union Catalog is the primary bibliographic resource available at the Center. It is a main entry card catalog arranged in alphabetic order encompassing 4,800 drawers, 3,395 of which currently contain cards. The holdings of 45 Pacific Northwest libraries are included in the Union Catalog.[1] In addition, the card catalog of the University of Washington Library is available within the building for inspection by Center staff.

Each of the drawers within the catalog, while containing cards limited to that drawer's narrow range of the alphabet actually contains several small alphabet "runs" of the same range. This is the result of a filing system which stresses making newly received cards quickly accessible to searchers without the time-consuming effort involved in in interfiling a small number of cards within the much larger Union Catalog.

Another service provided by PNBC tends to complicate even further the internal arrangement of the catalog. This service is one of assisting member libraries in reporting their holdings to two National Union Catalog projects. The Center has assumed total regional responsibility for representation in the Pre-1956 NUC (Mansell) by photocopying its entire holdings of pre-1956 imprints and forwarding the original cards to the Library of Congress, the photocopies are filed in the PNBC Union Catalog.

A different method has been employed to report holdings of post-1956 titles to NUC. In this instance the holdings of only eleven of the contributing libraries are being reported. Here the original cards are forwarded to the Library of Congress. There they are reproduced and the original cards are returned to PNBC for filing in the Union Catalog.

---

1. See App ndix Exhibit A-1 for a complete listing.

In order to determine the number of new and old cards in the catalog, these sections were measured to the nearest tenth of an inch in each of 174 randomly selected drawers. In addition, all of the cards not filed were also measured. The measurements were then translated to card counts (100 cards to the inch). In order to be able to estimate the number of different titles represented by the Cards at PNBC some 5,000 cards from the several alphabets were interfiled in one alphabet. By counting the number of different titles represented by the cards after interfiling it was possible to determine the ratio of new titles produced per new cards filed. This method then provided an estimate of card and title holdings as of April 15, 1972.

TOTAL CARDS AT PNBC	2,308,000
TOTAL DIFFERENT CARD TITLES AT PNBC	1,778,000

The distribution of these titles by date of publication was established from a random sample of 554 titles. The median publication date of the holdings of the union catalog is 1957-58. The mode is 1967. The range of dates recorded from the sample extended from 1972 to 1745. The distribution is summarized in Exhibit II-1.

Exhibit II-1

Age of Main Entries in PNBC's Union Catalog
April 3, 1972 -- Sample of 554

Date of Publication	Percent of Total	Cumulative Percentage of Total
1972	.36	.36
1971	1.62	1.98
1970	3.79	5.77
1969	4.15	9.92
1968	4.33	14.25
1967	5.42	19.67
1966	3.79	23.46
1965	4.87	28.33
1964	4.51	32.84
1963	2.35	35.19
1962	3.07	38.26
1961	4.15	42.41
1960	2.53	44.94
1959	2.35	47.29
1958	1.99	49.28
1957	1.44	50.72
1956	2.89	53.61
1955	1.81	55.42
1954	1.81	57.23
1953	1.81	59.04
1952	1.08	60.12
1951	1.26	61.38
1950	.54	61.92
1940 - 1949	6.32	68.24
1930 - 1939	6.14	74.38
1920 - 1929	5.78	80.16
1910 - 1919	4.87	85.03
1900 - 1909	4.87	89.90
1890 - 1899	2.71	92.61
1880 - 1889	1.62	94.23
1870 - 1879	.72	94.95
Before 1870	5.05	100.00

The number of locations per title was also examined. The low incidence of duplication of titles (Exhibit II-2) is particularly striking Almost one half of the titles are held by only one library. Two-thirds of the titles are held by fewer than three libraries.

Exhibit II-2

PNBC's Union Catalog
Number of Locations Per Title
April 14, 1972 - Sample of 592

Number of Locations Per Title	Percentage of all Titles	Cumulative Percentage
1	48.31	48.31
2	17.57	65.88
3	7.77	73.65
4	4.73	78.38
5	5.07	83.45
6	4.73	88.18
7	2.03	90.21
8	3.04	93.25
9	1.69	94.94
10	1.35	96.29
More than 10	3.71	100.00

The mean number of locations per title is 3.2308. When combined with sample data showing the precise locations for each of the 592 titles it was possible to estimate the distributions of locations among the libraries represented by PNBC's holdings. Those libraries with the greatest monographic title holdings listed at PNBC are as follows:

Exhibit II-3

PNBC's Union Catalog
Locations (Titles) Recorded at PNBC

Library	Percentage of Total Locations
University of British Columbia	13.21
University of Oregon	10.40
Seattle Public	7.58
Library Association of Portland	6.02
Oregon State University	5.94
Washington State Library	4.77
Oregon State Library	4.38
University of Montana	4.01
Vancouver Public	3.99
Tacoma Public	3.60
All other Libraries	36.10

The number of titles shown as being held at only one library were also noted. The libraries with the greatest number of titles unique to the union catalog are listed below. While the rank order of the libraries approximates that of Exhibit II-3, the unique character of the University of British Columbia Library's collection relative to that of other libraries becomes evident.

Exhibit II-4

PNBC's Union Catalog
Libraries Holding Unique Titles

Library	Percentage of Total Unique Titles
University of British Columbia	21.28
University of Oregon	12.06
Seattle Public	11.35
Oregon State University	9.93
Library Association of Portland	8.51
Washington State Library	4.96
Vancouver Public	4.26
Oregon State Library	3.55
University of Montana	2.84
Tacoma Public	2.13
All other Libraries	19.13

The presence of the University of Washington Library's card catalog is, of course, a great asset to the Center's operations and searches of that catalog are a part of the Center's routine procedures.[2] A study was conducted to determine the degree to which the University of Washington's holdings supplements the holdings of libraries with bibliographic records contained in the Union Catalog. A random sample of 368 titles was drawn from the U of W's catalog and searched against PNBC's Union Catalog. A total exact duplication (precise match of title and edition) of 230 titles was found. Thus, 138 U of W titles were unique relative to Union Catalog holdings and 37.5% of the University's title holdings (or 305,700 titles) are estimated to supplement the 1,778,000 different titles represented at PNBC.

These 2,083,700 different catalog card titles are further supplemented by book catalog and microfilm files of the records of the Oregon State Library, the King County Library System, Washington State University

2. See Chapter VI and Exhibit VI-2 for details.

Library and several other major libraries. These files and additional bibliographic resources are cited in Appendix Exhibits A-1 and A-2.

In the absence of a statistically rigorous estimate of the total number of different titles represented by these resources -- not possible within the confines of this study -- we would suggest that between 2,500,000 and 3,000,000 different title records are accessible at the Bibliographic Center -- all of these describing resources available in libraries of the Pacific Northwest.

CHAPTER III

CHARACTERISTICS OF REQUESTS

The growth in interlibrary loan requests received at the Pacific Northwest Bibliographic Center over the last twenty years is recorded in the following table.

Exhibit III-1

Interlibrary Loan Requests Received at PNBC
1953 - 1972

Fiscal Year	Number of Requests
1953	10,723
1954	11,524
1955	12,394
1956	11,714
1957	11,856
1958	13,615
1959	12,741
1960	12,260
1961	13,678
1962	14,092
1963	14,465
1964	15,348
1965	16,223
1966	16,077
1967	18,122
1968	19,368
1969	17,511
1970	17,766
1971	21,213
1972	31,502*

*Estimate; 28,378 through May '72

Development of Pacific Northwest Regional Health Sciences Library, to which all appropriate requests were to be sent, no doubt accounts for the sudden reversal in volume from 1968 to 1969. The increase in FY 1971 volume was sudden and has since been continuing sharply upward. Since Feb.

1971, each succeeding month has established an all-time monthly high.

The number of user libraries has also increased dramatically within the last few years. In 1969-70, 192 member libraries used PNBC[1]. During calendar 1971, 279 libraries within the region sent ILL requests to the Center. Those libraries placing the most requests with PNBC are listed in the following table.

Exhibit III-2

Libraries Placing Requests With PNBC;
The 25 Leading Requestors
July 1971 - December 1971

Library	Number of Requests
University of Alaska	682
Washington State Library	558
Timberland Regional (Wa)	409
King County (Wa)	388
Alaska State Library	380
Seattle Public (Wa)	380
North Central Regional (Wa)	329
Western Washington State College	275
University of Oregon	272
Spokane Public (Wa)	265
Billings Public (Mt)	259
Nez Perce County (Id)	256
Weyerhaeuser Timber Co. (Wa)	241
Idaho State University	231
Washington State University	225
Spokane County (Wa)	221
University of British Columbia	216
University of Puget Sound (Wa)	214
University of Idaho	199
Pierce County Library (Wa)	180
Oregon State Library	179
Evergreen State College (Wa)	178
Kitsap Regional (Wa)	169
University of Montana	150
Tacoma Public (Wa)	149
Total	7,005

1. Currier, p. 53a

Exhibit III-3 shows the distribution of requests received by type of agency. Data from that table is further summarized in Exhibit III-4 and compared to similar data from the Currier study.

The use of PNBC's Union Catalog by the interlibrary loan staff of the University of Washington to assist that institution's borrowing, is not reflected in these presentations.

Exhibit III-3

Interlibrary Loan Requests Received
By Type of Agency
July 1971 - December 1971

Description	Number of Requests	Percentage
Academic, Public		
Universities	2,495	19.04
Four Year Colleges	545	4.16
Two Year Colleges	561	4.28
Other	6	.05
Academic, Private		
Universities	657	5.01
Four Year Colleges	675	5.15
Two Year Colleges	18	.14
Other	10	.08
Public Libraries	6,190	47.24
State Libraries	1,237	9.44
Federal Agencies		
Military	126	.96
Executive Branch Agencies	57	.44
Other	2	.02
State Agencies (other than State Libraries)	12	.09
Special Libraries		
Business and Industry	386	2.95
Private Organizations and Associations	---	---
Hospitals	42	.32
Denver Bibliographic Center		
Academic	---	---
Public	2	.02
Special	---	---
Other	17	.13
Region Covered by Denver Bibliographic Center		
Academic	3	.02
Public	5	.04
Special	---	---
Other	2	.02
California		
Academic	1	.01
Public	8	.06
Special	3	.02
States Outside Pacific NW Denver Region and California		
Academic	33	.25
Public	7	.05
Special	2	.02
Other	1	.01
TOTAL	13,103	100.02

Exhibit III-4

Interlibrary Loan Requests Received
By Library Type

Type of Library	1969-70 Percent[2]	July-Dec., 1971 Percent
Academic	27.08%	38.19%
Public	58.85	47.41
State	3.65	9.44
Special	10.42	3.30
Others		1.66
TOTALS	100.00%	100.00%

2. Currier. p.53a

It should be noted that less than one-half of the requests recently received have been from public libraries.

Exhibit III-5 reveals that more than half the requests received are from Washington and that less than one percent are from outside the region.

Exhibit III-5

Interlibrary Loan Requests Received
By Geographic Area
July 1971 - April 1972

Area	Requests Received by PNBC	
	Number	Percent
Alaska	2,569	10.18
Idaho	2,074	8.22
Montana	2,738	10.85
Oregon	3,833	15.19
Washington	13,078	51.81
British Columbia	800	3.17
SUB TOTAL FOR REGION	25,092	99.41
Outside Region	148	.59
GRAND TOTAL	25,240	100.00

An analysis of 3,632 requests was made to determine the means by which requests were transmitted to the Center. Mail requests were the dominant method and accounted for 79.74% of all requests. Teletype requests amounted to 17.59% while telephone requests represented only 2.67% of the total.

In order to determine the detailed characteristics of requests received at the Center, an analysis was made of all requests logged-out on each of ten working days in the period Sept.-Dec., 1971.[3] The total number of requests studied was 1,258.

The time lapse between the date of the request (typed on the ILL form) and its receipt at the center was calculated for 1,103 items. The distribution of elapsed times is shown in Exhibit III-6 (time over weekends included).

Exhibit III-6

Elapsed Time Between
Date of Request and Receipt
at PNBC

Days Elapsed	Number of Requests	Percentage	Cumulated Percentage
0	73	6.88	6.88
1	73	6.88	13.76
2	239	22.53	36.29
3	244	23.00	59.29
4	174	16.40	75.69
5	143	13.48	89.17
6	32	3.02	92.19
7	18	1.70	93.89
8	16	1.51	95.40
9	4	.38	95.78
10	9	.85	96.63
11-26	36	3.37	100.00
TOTALS	1,061	100.00	--
Mean elapsed time		3.62 days	

3. Mondays: Sept. 27, Nov. 8; Tuesdays: Oct. 12, Nov. 2; Wednesdays: Oct. 6, Nov. 17; Thursdays: Sept. 23, Dec. 16; Fridays: Sept. 17, Nov. 5.

Those requests in transit for longer than four days were generally a result of routings through a state library. Those received the same date of the request were all transmitted to PNBC by teletype or telephone.

Thirty-four percent of the requests had been routed to PNBC via state libraries. Of these, 58% were from the Washington State Library.

Some of the specific characteristics of the 1,258 requests studied are as follows:

Exhibit III-7

Types of Materials Requested
Based on Sample of 1,258

Type	Percentage of all Requests Received
Serials	26.63%
Fiction	2.07
Foreign Language Titles	7.39
German	2.86
French	1.83
Russian	1.03
Spanish	.87
Others	.79
Juveniles	.56
Theses	.79
Genealogies and Local Histories	3.74
Government Documents	2.38

A comparison of the distribution of imprint dates for items requested (Exhibit III-8) with the distribution of imprint dates for items contained in the Union Catalog (Exhibit II-1) reveals:

1. That the median age of imprints requested is of a more recent date (1960-61) than the median age of Union Catalog holdings (1957-58);
2. That the percentage of requests for recent imprints (1970 to

date) is greater than the proportion of holdings for that period (10.38% vs. 5.77%);

3. That a smaller percentage of pre-1900 requests are made (6.43%) than are represented by the percentage of holdings for that period (10.1%).

Exhibit III-8

Imprint Dates of Items Requested - Sample of 1,108

Year	Number	Percent	Cumulated Percent
1971	34	3.07	3.07
1970	81	7.31	10.38
1969	75	6.77	17.15
1968	71	6.41	23.56
1967	56	5.05	28.61
1966	59	5.32	33.93
1965	48	4.33	38.26
1964	45	4.06	42.32
1963	33	2.98	45.30
1962	31	2.80	48.10
1961	10	.90	49.00
1960	32	2.89	51.89
1959	31	2.80	54.69
1958	24	2.17	56.86
1957	22	1.99	58.85
1956	15	1.35	60.20
1955	8	.72	60.92
1954	17	1.53	62.45
1953	15	1.35	63.80
1952	14	1.26	65.06
1951	14	1.26	66.32
1950	9	.81	67.13
1949	12	1.08	68.21
1948	20	1.81	70.02
1947	4	.36	70.38
1946	6	.54	70.92
1945	2	.18	71.10
1944	4	.36	71.46
1943	7	.63	72.09
1942	5	.45	72.54
1941	7	.63	73.17
1940	8	.72	73.89
1930-39	102	9.21	83.10
1920-29	48	4.33	87.43
1910-19	37	3.34	90.77
1900-09	31	2.80	93.57
1890-99	24	2.17	95.74
1880-89	9	.81	96.55
1870-79	10	.90	97.45
1860-69	8	.72	98.17
1850-59	5	.45	98.62
1840-49	6	.54	99.16
1830-39	-	-	-
1820-29	1	.09	99.25
1810-19	1	.09	99.34
1800-09	1	.09	99.43
1750-99	4	.36	99.79
1700-49	-	-	-
1650-99	-	-	-
Before 1650	2	.18	99.97
TOTAL	1108	99.97	99.97

A study of the 1,258 requests comprising the ten day sample revealed that 231 requests (18.36%) were received with defective bibliographic citations. The most common types of errors were (in order): incomplete author, incorrect author, misspellings and typographical errors, serial titles scrambled. It is estimated that about half of these defective requests required verification before the search could be completed.

CHAPTER IV

PROCESSING OF REQUESTS

The process of responding to requests for location data at the Center requires in each instance a search of the union catalog and, if necessary, additional bibliographic resources. This chapter describes this search process and presents time and cost data for this key function.

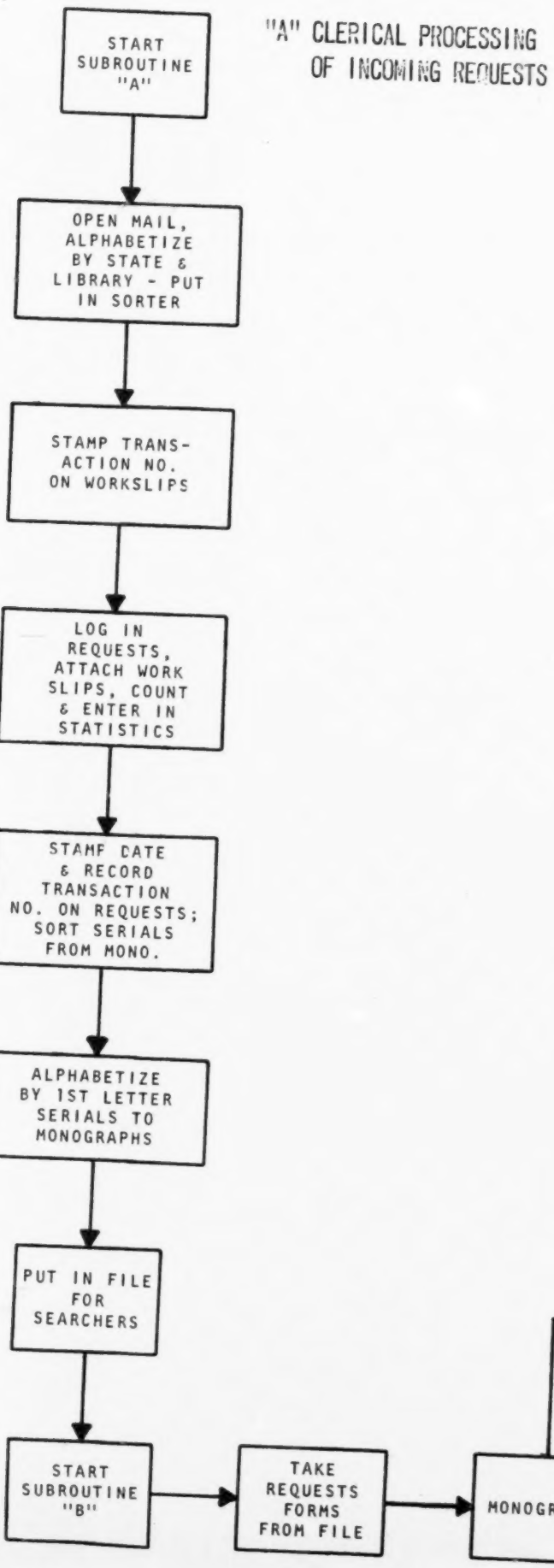
During the study of these operations, a number of procedural changes were made at the Center. Many, but certainly not all, of these changes were a result of the descriptive and analytical efforts required by this study. Alterations made during the initial phase of the analysis were incorporated into the flowcharts and time and cost studies. However, it became necessary to "freeze" the continuously evolving system at a fixed point in order to be able to describe the routines in comprehensible detail. January 1, 1972 was chosen as the "freeze" point and thus the flowchart of the searching routines (Exhibit IV-1) and the time and cost data reflect the procedures at that time.

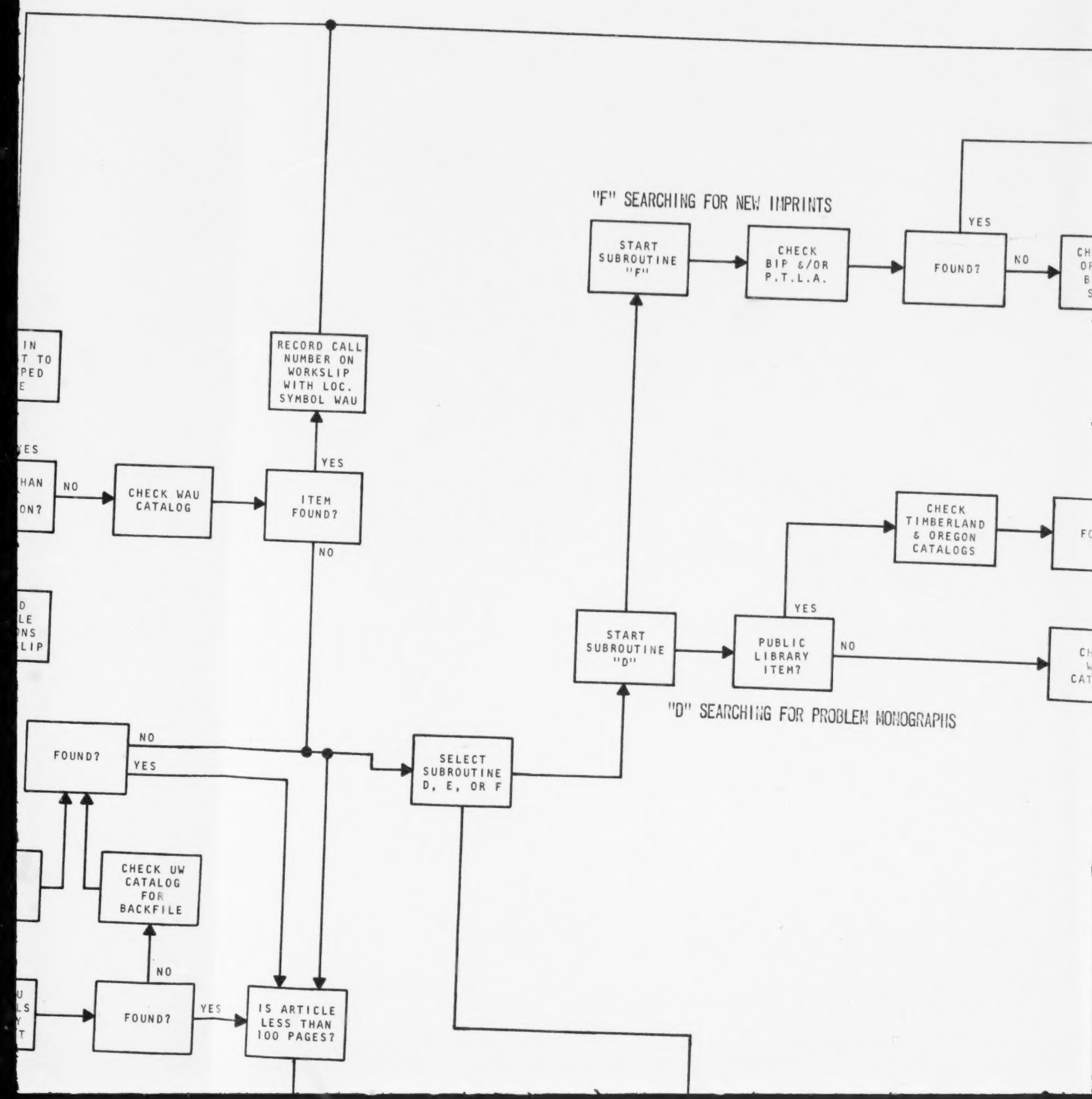
For the purpose of simplifying the description of search routines, we have made distinctions between "routine" and "problem" requests. Routine requests include

(a) Requests for monographs which were forwarded to library locations the same day they were received or the next working day after receipt. In general, these items are located inside the region, via the PNBC catalog, the University of Washington catalog, or other resources located in the Center offices;

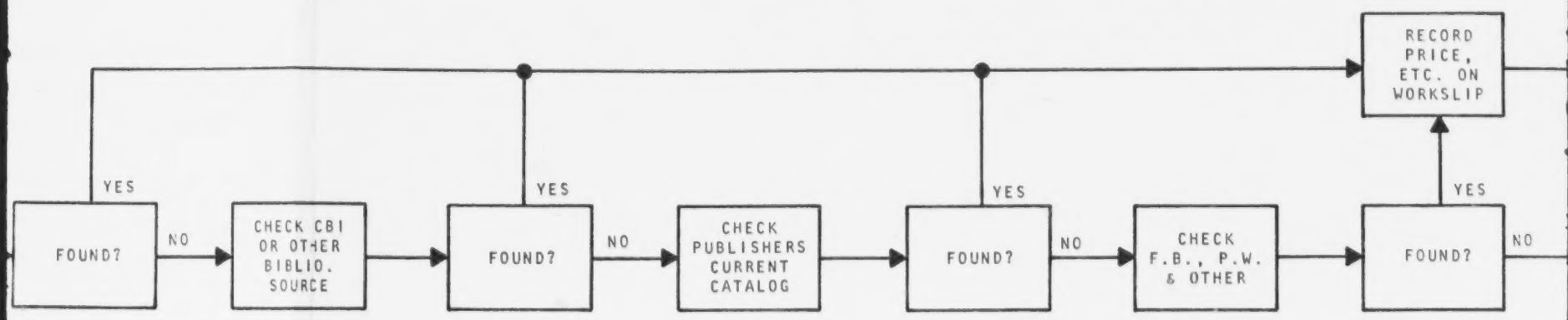
(b) Requests for serials filled by photocopy from University of Washington collections. Again, these also are usually processed and mailed the day of receipt or the next working day.

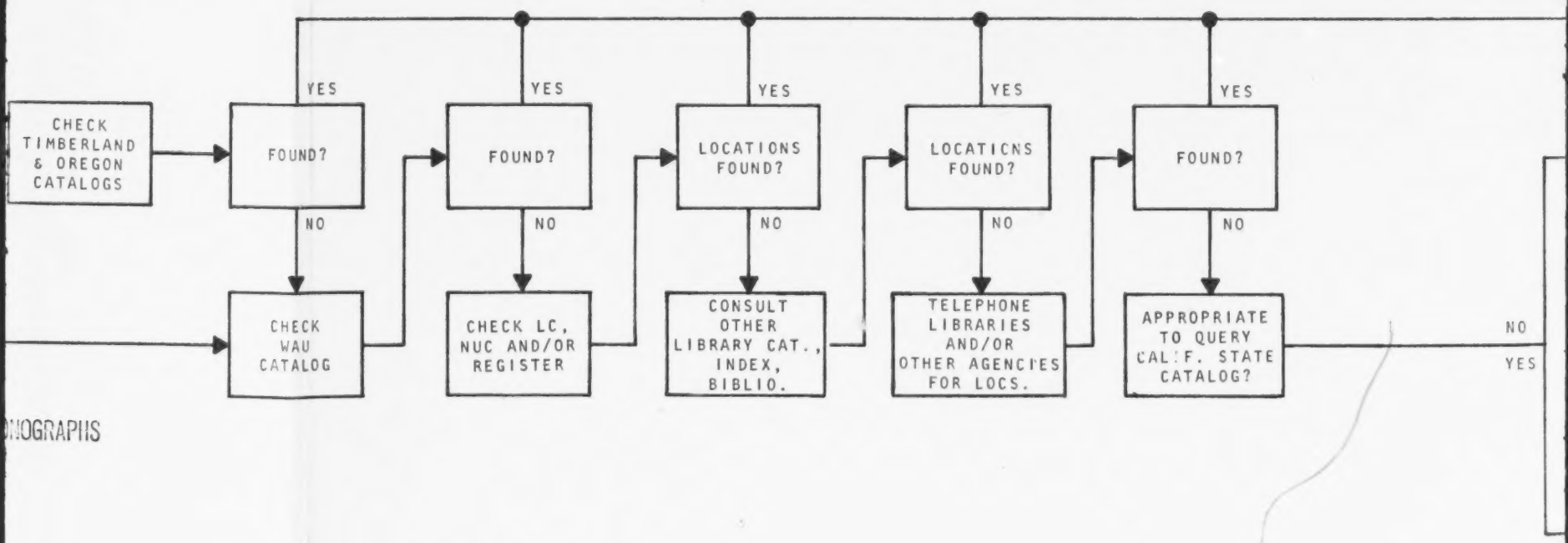
"A" CLERICAL PROCESSING
OF INCOMING REQUESTS



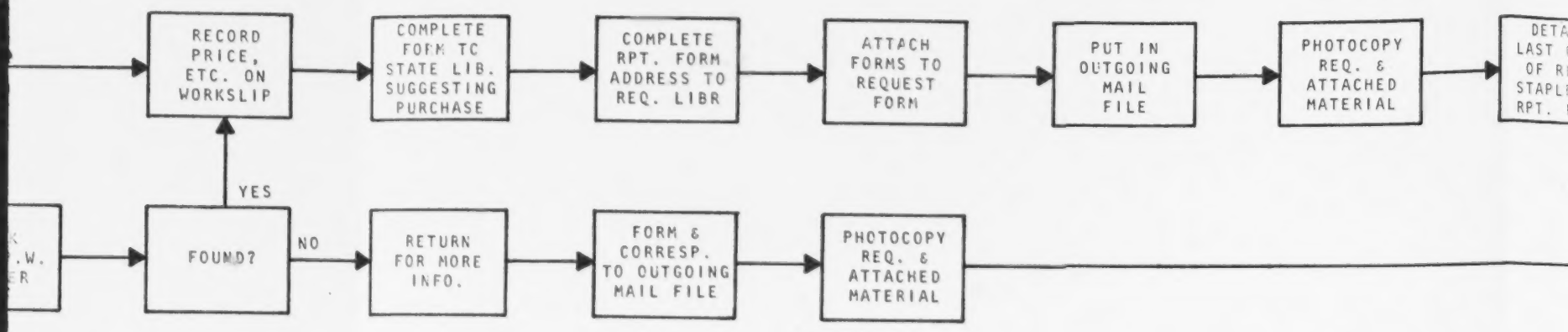

"F" SEARCHING FOR NEW IMPRINTS
START SUBROUTINE "F"
CHECK BIP &/OR P.T.L.A.
FOUND?
YES
NO
RECORD CALL NUMBER ON WORKSLIP WITH LOC. SYMBOL WAU
YES
NO
CHECK WAU CATALOG
ITEM FOUND?
YES
NO
CHECK TIMBERLAND & OREGON CATALOGS
START SUBROUTINE "D"
PUBLIC LIBRARY ITEM?
YES
NO
"D" SEARCHING FOR PROBLEM MONOGRAPHS
FOUND?
NO
YES
SELECT SUBROUTINE D, E, OR F
CHECK UW CATALOG FOR BACKFILE
NO
FOUND?
YES
IS ARTICLE LESS THAN 100 PAGES?

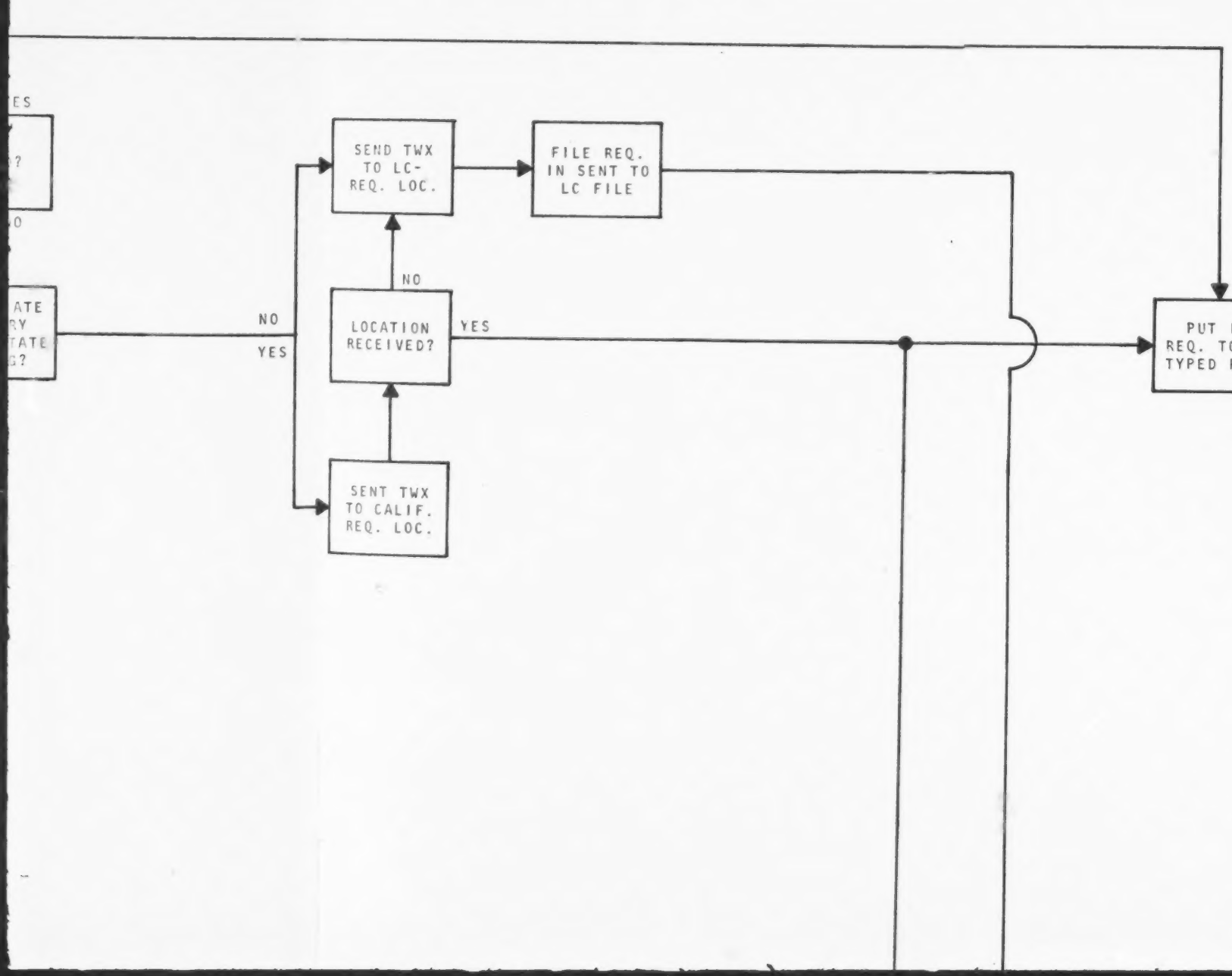
PACIFIC NORTHWEST BIBLIOGRAPHIC CENTER
SEARCHING ROUTINE



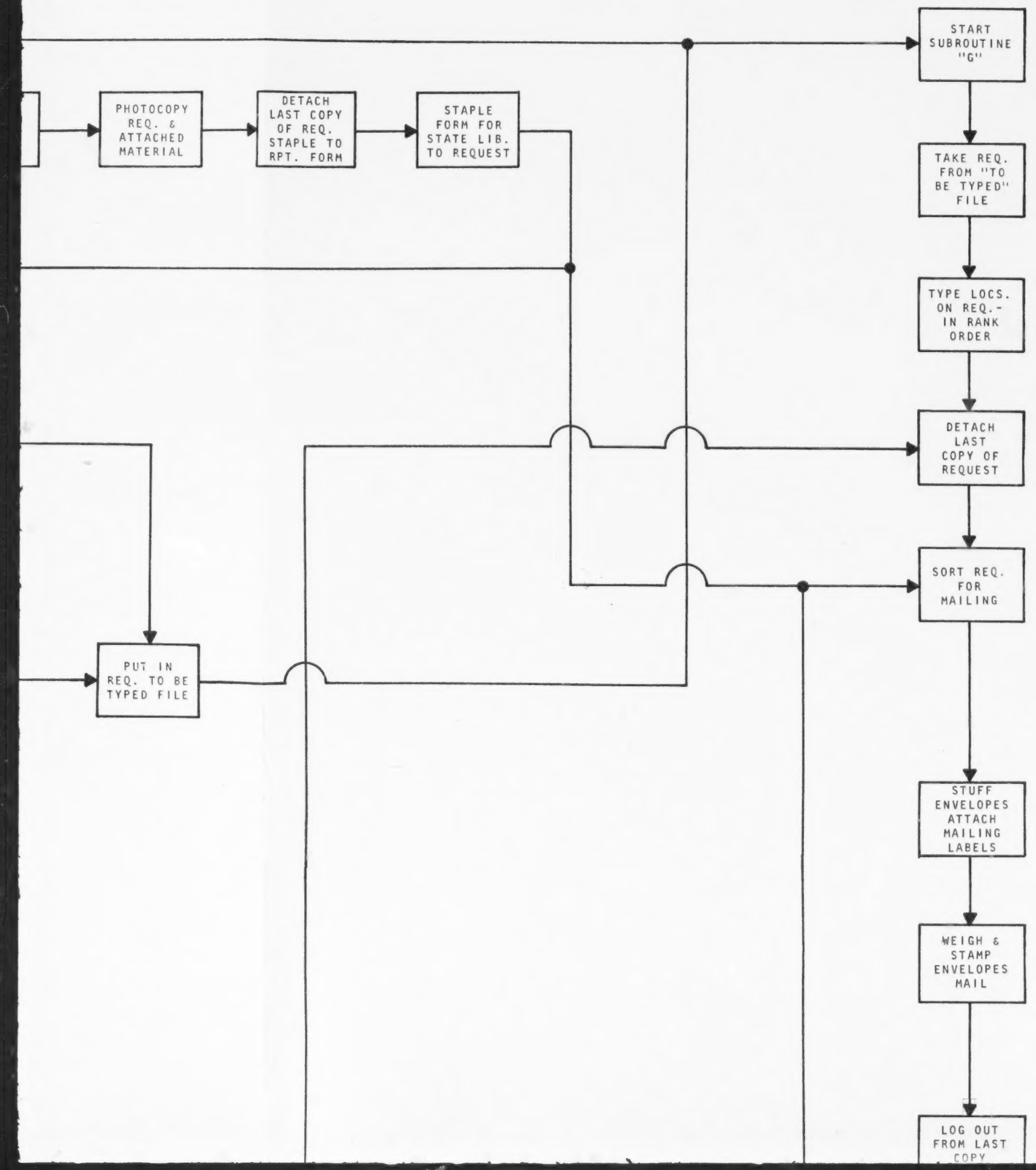


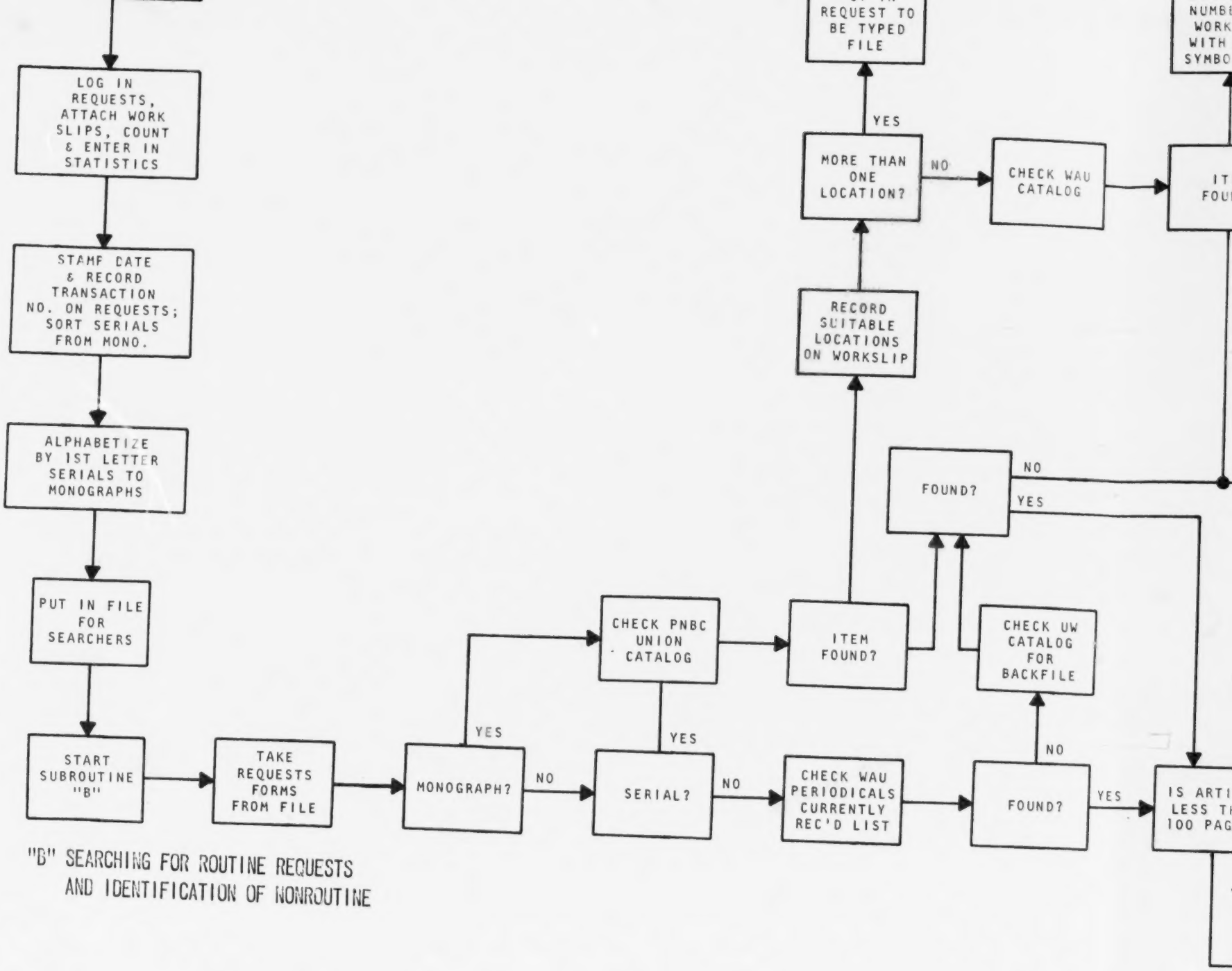
NOGRAPHS


RECORD PRICE, ETC. ON WORKSLIP
COMPLETE FORM TC STATE LIB. SUGGESTING PURCHASE
COMPLETE RPT. FORM ADDRESS TO REQ. LIBR
ATTACH FORMS TO REQUEST FORM
PUT IN OUTGOING MAIL FILE
PHOTOCOPY REQ. & ATTACHED MATERIAL
YES
FOUND?
NO
RETURN FOR MORE INFO.
FORM & CORRESP. TO OUTGOING MAIL FILE
PHOTOCOPY REQ. & ATTACHED MATERIAL


SEND TWX TO LC- REQ. LOC.
FILE REQ. IN SENT TO LC FILE
NO
LOCATION RECEIVED?
YES
NO
YES
SENT TWX TO CALIF. REQ. LOC.
PUT IN REQ. TO BE TYPED FILE

"G" CLERICAL PROCESSING
OF OUTGOING REQUESTS


PHOTOCOPY REQ. & ATTACHED MATERIAL
DETACH LAST COPY OF REQ. STAPLE TO RPT. FORM
STAPLE FORM FOR STATE LIB. TO REQUEST
PUT IN REQ. TO BE TYPED FILE
START SUBROUTINE "G"
TAKE REQ. FROM "TO BE TYPED" FILE
TYPE LOCS. ON REQ.- IN RANK ORDER
DETACH LAST COPY OF REQUEST
SORT REQ. FOR MAILING
STUFF ENVELOPES ATTACH MAILING LABELS
WEIGH & STAMP ENVELOPES MAIL
LOG OUT FROM LAST COPY



"B" SEARCHING FOR ROUTINE REQUESTS
AND IDENTIFICATION OF NONROUTINE

ABBREVIATIONS

BIP	BOOKS IN PRINT
CBI	CUMULATIVE BOOK INDEX
FB	FORTHCOMING BOOKS
LC	LIBRARY OF CONGRESS
NST	NEW SERIAL TITLES
NUC	NATIONAL UNION CATALOG
PTLA	PUBLISHER'S TRADE LIST ANNUAL
PW	PUBLISHER'S WEEKLY
ULS	UNION LIST OF SERIALS
WAU	UNIVERSITY OF WASHINGTON

EXHIBIT IV-1

NUMBER ON WORKSLIP WITH LOC. SYMBOL WAU

YES

ITEM FOUND?

NO

YES

START SUBROUTINE "D"

PUBLIC LIBRARY ITEM?

YES

CHECK TIMBERLAND & OREGON CATALOGS

FOUND?

YES

NO

NO

CHECK WAU CATALOG

FOUND?

YES

NO

CHECK LC, NUC AND/OR REGISTER

"D" SEARCHING FOR PROBLEM MONOGRAPHS

SELECT SUBROUTINE D, E, OR F

YES

IS ARTICLE LESS THAN 100 PAGES?

START SUBROUTINE "C"

RECORD CALL NO. & LOC. OF SERIAL ON WORKSLIP

"C" SEARCHING FOR ROUTINE SERIAL REQUESTS FILLED BY PHOTOCOPY FROM WAU

IN MAIN LIBRARY?

RETRIEVE FROM STACKS

PUT REQUEST FORM IN VOLUME

MARK PAGES TO BE COPIE

TELEPHONE BRANCH

MISSING OR OUT?

NO

ARRANGE FOR PICKUP

PICKUP SERIAL & BRING TO PIBC

YES

START SUBROUTINE "E"

CHECK REGIONAL SERIAL LISTS

2 LOCS FOUND?

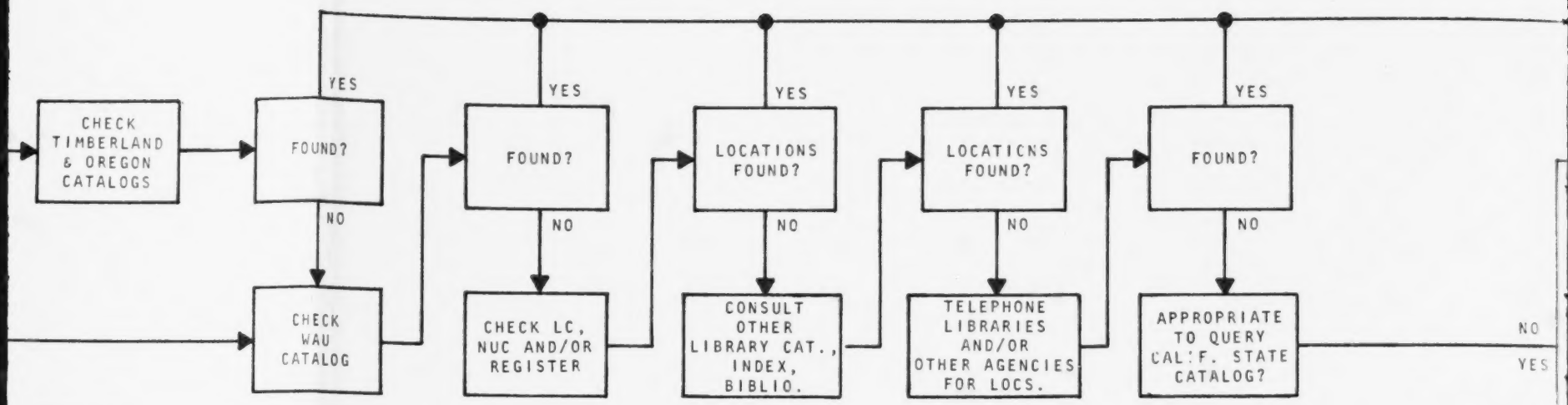
NO

CHECK UL AND/OR NST AS APPLICAB

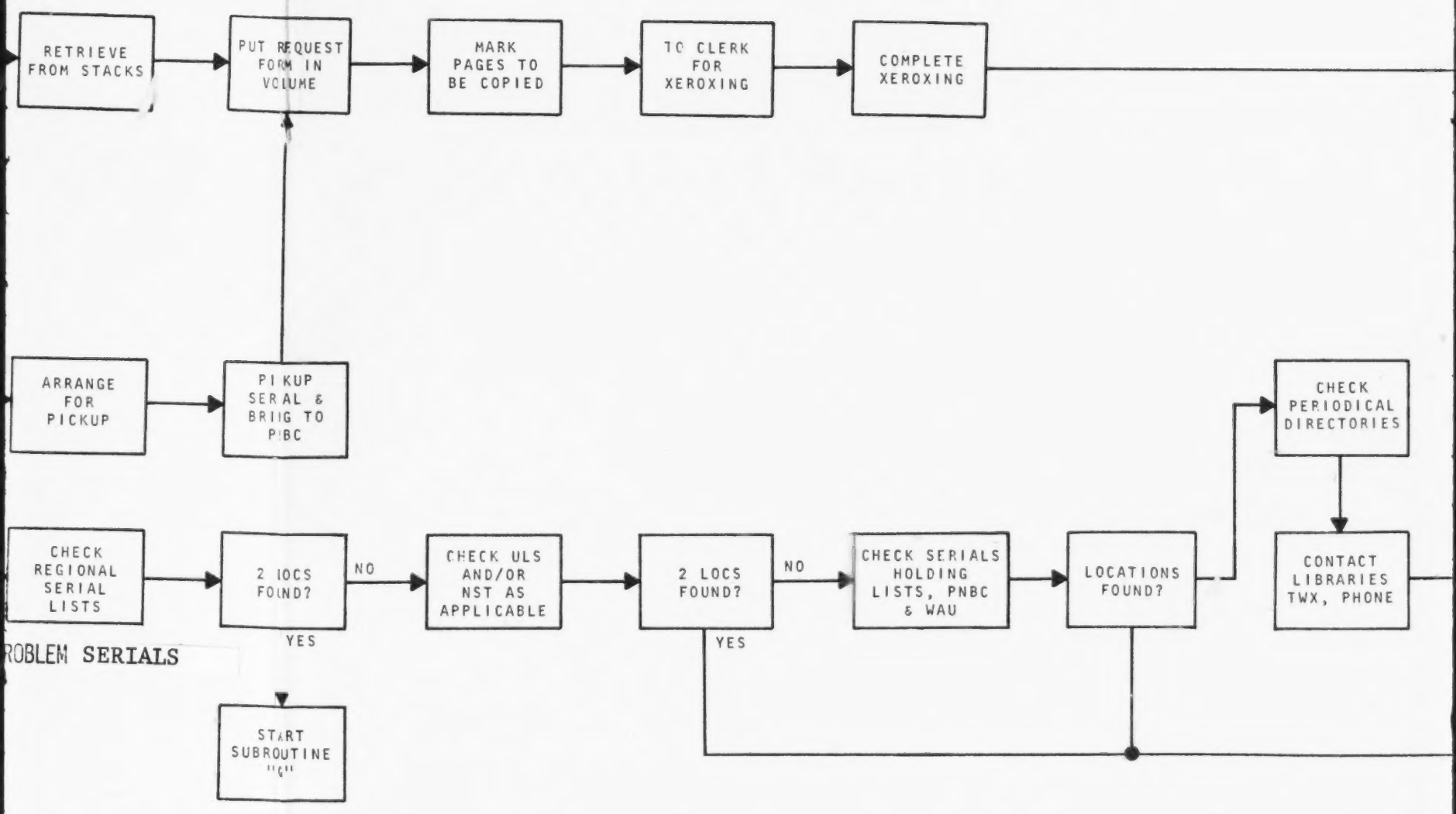
YES

"E" SEARCHING FOR PROBLEM SERIALS

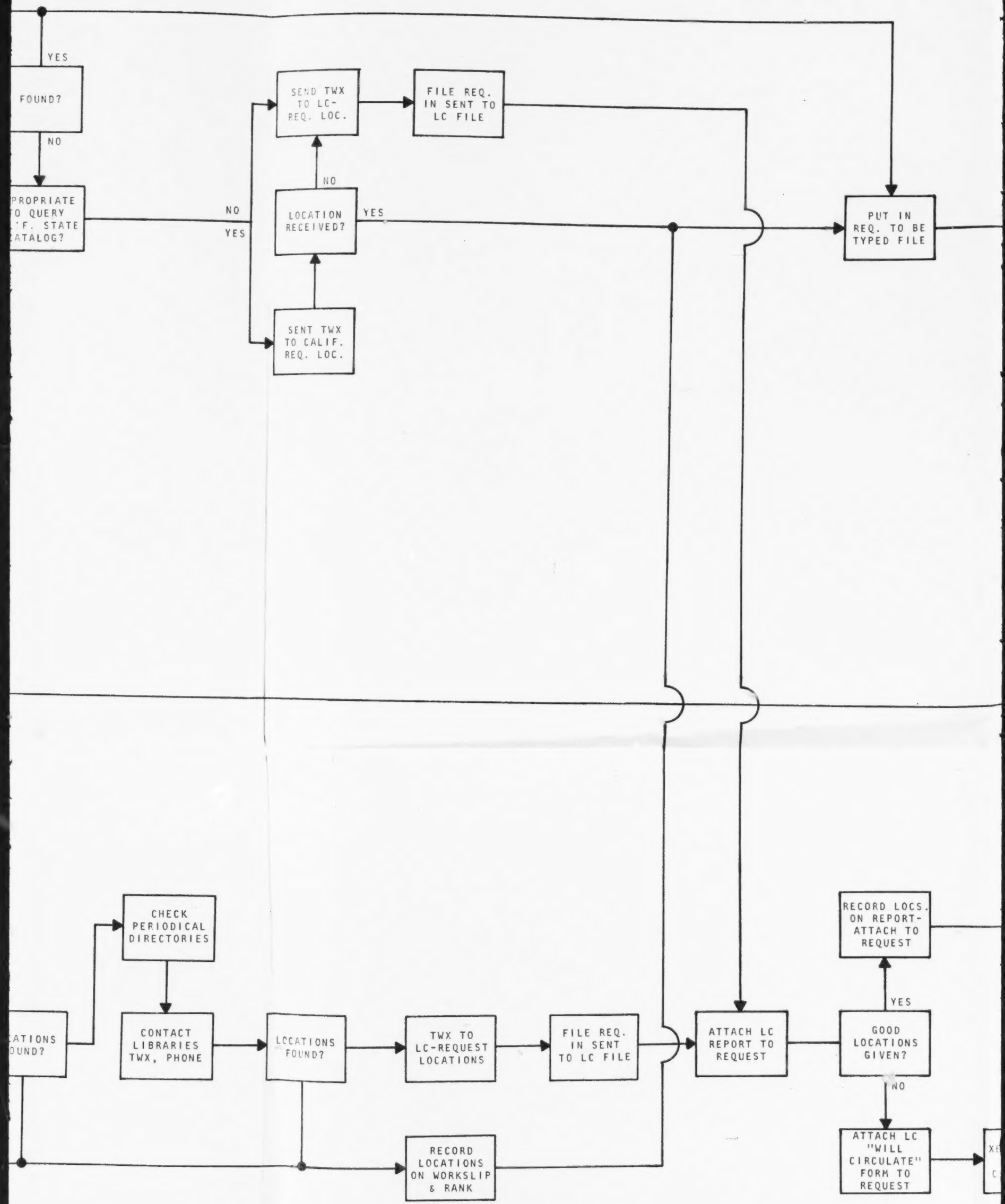
START SUBROUTINE "G"

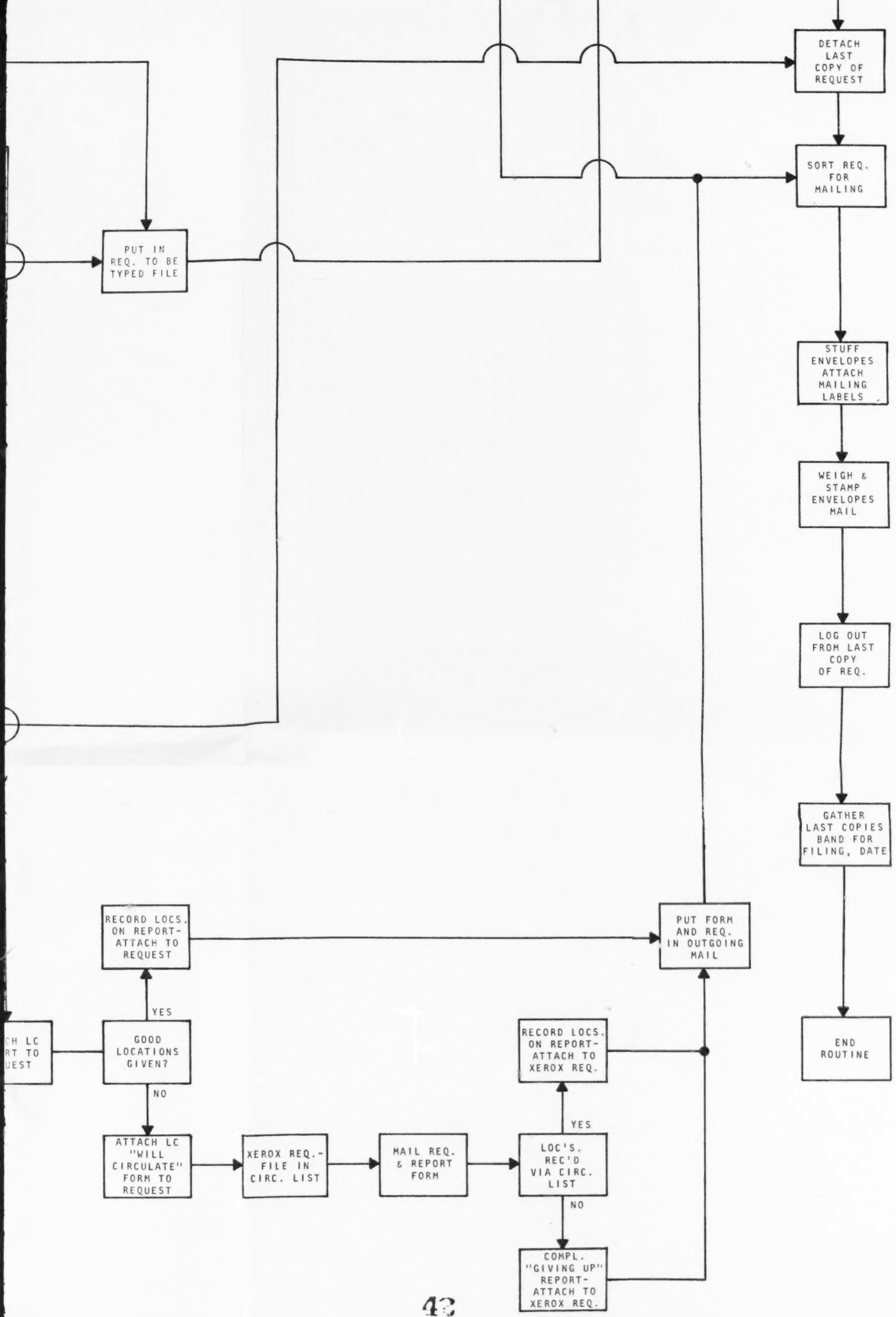


MONOGRAPHS



ROBLEM SERIALS


YES
FOUND?
NO
PROPRIATE
O QUERY
F. STATE
ATALOG?
NO
YES
SEND TWX
TO LC-
REQ. LOC.
FILE REQ.
IN SENT TO
LC FILE
NO
LOCATION
RECEIVED?
YES
SENT TWX
TO CALIF.
REQ. LOC.
PUT IN
REQ. TO BE
TYPED FILE
ATIONS
OUND?
CHECK
PERIODICAL
DIRECTORIES
CONTACT
LIBRARIES
TWX, PHONE
LOCATIONS
FOUND?
TWX TO
LC-REQUEST
LOCATIONS
FILE REQ.
IN SENT
TO LC FILE
ATTACH LC
REPORT TO
REQUEST
RECORD LOCS.
ON REPORT-
ATTACH TO
REQUEST
YES
GOOD
LOCATIONS
GIVEN?
NO
ATTACH LC
"WILL
CIRCULATE"
FORM TO
REQUEST
RECORD
LOCATIONS
ON WORKSLIP
& RANK


DETACH LAST COPY OF REQUEST
SORT REQ. FOR MAILING
PUT IN REQ. TO BE TYPED FILE
STUFF ENVELOPES ATTACH MAILING LABELS
WEIGH & STAMP ENVELOPES MAIL
LOG OUT FROM LAST COPY OF REQ.
GATHER LAST COPIES BAND FOR FILING, DATE
END ROUTINE
PUT FORM AND REQ. IN OUTGOING MAIL
RECORD LOCS. ON REPORT- ATTACH TO REQUEST
YES
GOOD LOCATIONS GIVEN?
NO
ATTACH LC "WILL CIRCULATE" FORM TO REQUEST
XEROX REQ.- FILE IN CIRC. LIST
MAIL REQ. & REPORT FORM
LOC'S. REC'D VIA CIRC. LIST
YES
NO
RECORD LOCS. ON REPORT- ATTACH TO XEROX REQ.
COMPL. "GIVING UP" REPORT- ATTACH TO XEROX REQ.

A "problem" request, for the purposes of this study, is defined as any request for a monograph or serial which is held two or more days in PNBC for extended search. This category includes the following classes of requests:

(a) Requests received with defects in main entry or other parts of the citation which necessitate searching for verification. These are often eventually located through the PNBC catalog after the correct entry has been established. Since the PNBC catalog is an author list only, with relatively few cross references, the importance of a correct citation is critical.

(b) Requests for photocopies (or loans) of articles in periodicals which cannot be filled from the University of Washington collections. These often require extensive search for verification as well as for locations, and not infrequently a dozen or more serials lists and other bibliographic resources must be consulted for a single request. Occasionally such a request will be filled locally by photocopy, if the search leads to its location in one of the University of Washington libraries after verification, but this happens infrequently.

(c) Correctly cited monographs which cannot be located in the Northwest region. These require one or more of the following:

(1) Telephoning academic or large public and regional libraries in Washington whose holdings are not represented in PNBC. A number of libraries are telephoned each day in an attempt to locate requested items;

(2) Consulting the National Union Catalog and the Library

of Congress Register of Additional Locations;

(3) Consulting other library catalogs in the University of Washington collection;

(4) Sending teletype inquiries to the:

California State Library Union Catalog (Daily)

Library of Congress (Daily)

Bibliographical Center for Research, Rocky Mountain Region, Inc. (Occasionally)

(5) Asking the Library of Congress to circularize (via its Weekly List of Unlocated Research Books) for titles not listed in LC's own records.

The narrative description of searching routines which follow, describes procedures as of January 1, 1972. Footnotes are used to update where appropriate.

Subroutine A: Clerical Processing of Incoming Requests

When incoming requests are received, they are alphabetized by state of origin and grouped by requesting libraries. Transaction numbers are stamped on the workslips, and these are attached to the request forms. Requests are then logged in[1] and entered in the statistics, the transaction number and date of receipt are recorded on the request form, serials are separated from monographs, and requests are alphabetized by main entry.[2]

1. Logging in is no longer done. The daily log has been superseded by retention of a copy of each request form, together with the work record, in a numerical file.
2. Alphabetizing is no longer done at this point. It was found to be more efficient to have each searcher alphabetize any group of requests taken from the file for preliminary search.

Subroutine B: Searching for Routine Requests and Identification of "Problem" Requests.

This subroutine represents the procedure of "routine" search, i.e., utilizing PNBC resources for locating materials within the region. Each searcher removes an easily manageable number of requests from either the monograph or serial section of the file. Monograph requests are first routinely checked against the PNBC catalog. If locations are found, these are recorded on the workslip. When two or more locations are obtained from the PNBC catalog, the request is put directly in the file of outgoing requests to be typed and forwarded (see Subroutine G). Remaining requests with fewer than two locations are next checked against the University of Washington catalog.[3] If the item is found here, the University of Washington call number is written on the workslip, the University location file is checked and the location(s) recorded in the space provided on the workslip.[4] If the book is in the main library building and if the University of Washington is the selected location, shelf is checked to determine whether it is available. If it is not on the shelf, a brief check is made of circulation records and the resulting information is recorded on the workslip.

All monograph requests having two or more locations at this point are put in the typing file to be forwarded.

---

3. This procedure is now changed in 3 respects: (a) King County Book Catalog, received in April 1972, is routinely consulted immediately after PNBC Union Catalog; (b) After Union Catalog, all further searching is done, wherever possible by title to allow corrections of main entry errors early in search; (c) To avoid waste in filling requests where multiple locations are not readily available, single locations are now sent on with a "bounce back" notice to be returned immediately to PNBC for further searching for any which can't be filled.
4. Since these routines were described on flowchart, new workslips have been put into use with considerable increase in efficiency. A "routine" workslip is used for subroutines B and C. Separate workslips for problem serials and monographs are used for requests carried through subroutines D, E, or F.

Subroutine C: Searching for Routine Requests Filled by Photocopy from University of Washington Collections.

If the requested item is an article in a serial, the "routine" search procedure consists of first consulting the University of Washington list of Serials Currently Received. If the article is (a) in a serial presently received by the U of W, and (b) in an issue recorded as held in the serials record, the call number and campus location(s) are recorded on the workslip and the request is placed in the file of materials to be retrieved and photocopied.[5] If the serial is not found in U of W serials list, the U of W catalog is checked to determine whether the library has a backfile of the serial including the requested issue. If so, the call number is recorded, location file checked and request placed in the photocopy file. Further handling is routine: Serials are retrieved, articles photocopied, material is mailed out promptly to the requesting library and serials are returned to their University locations.

Subroutine D: Problem Searches for Monographs.

This subroutine applies to requests for monographs having fewer than two usable locations as a result of the preliminary searching process (i.e., checking PNBC, King County and University of Washington Catalogs).[6]

5. The practice of telephoning branches of the U of W library to locate serial articles has been largely discontinued. At present a PNBC staff member devotes nearly full time to retrieving and photocopying serials. Requests for serials located only in the Health Sciences library are forwarded to that library, via a daily courier, to be filled.
6. The definition of "problem" searches has been altered since this study was begun. With the adoption of the new "routine" workslip, the definition of a problem search has come to mean a request that cannot be located inside the region after consulting all regional resources now available to PNBC. The number of these resources has grown since Sept. 1971 from 3 (PNBC, Timberland and Oregon State Library catalogs) to upwards of five, including the King County book catalog and Washington State University catalog on microfilm. The catalogs of three state college libraries will soon be added, increasing the resources of PNBC--and also adding to the number of steps involved in the "routine" searching process.

The first step in this subroutine is to select the appropriate search strategy. This is determined by the nature and the imprint date of the material requested.[7] When this has been decided, the request will be checked against an appropriate combination of regional resources which may include the Oregon State Library catalog, Timberland-North Central Regional Catalog, and the microfilm catalog of Washington State University. If this stage of search results in a single regional location, the request will usually be forwarded to that location.[8] If no locations are found, the request is replaced in the reassignment file. The search supervisor will then attach a green workslip (for advanced monograph searches), and indicate on it the first steps to be taken in the advanced stage of search. This will involve consulting various bibliographic tools, notably the National Union Catalog and Library of Congress Catalog, Books in Print, and many others. The request will be handled by the entire advanced searching staff. If no locations are found, but bibliographic data can be verified, the request will probably be referred to

---

7. The decision regarding search strategy is now made by the searching supervisor. After preliminary search is completed, those items with fewer than two regional locations are placed in a file labelled "to be reassigned". The search supervisor then examines these, marks on the workslips which sources are to be consulted next, and places the request in the appropriate file section (e.g., "to be searched in Oregon/Timberland/King County," "search microfilm catalogs," etc.) In most cases more than one further source to be checked is indicated. After the first one has been checked, it is the searcher's responsibility to see that it is placed in the file for the next step indicated. If at any point in the search it appears that further bibliographic work is needed before searching can be completed, the request is put back for reassignment. In some cases these requests are sent back to the requesting library attached to a new form requesting further information, which informs the asking library what work has been done so far and what further information is needed. In most cases, bibliographic data can be completed or verified from bibliographic resources available in PNBC or the University of Washington library.
8. Single-location requests are now sent out with a form attached, asking that the lending library return the request intact to PNBC if it is unable to fill it. This eliminates the time-consuming and duplicative process of requiring the asking library to resubmit it for problem searching.

the California Union Catalog and/or the Library of Congress, via teletype.[9] Further procedure is the same as that described for problem serials searches.

Subroutine E: Searching for "Problem" Serials.

If the requested serial is not in any of the University of Washington library collections, further search is required, utilizing a number of serials lists acquired by PNBC during the past year. The number of these consulted and the order in which this is done will vary depending on the nature of the material requested. (The procedure for serials searching has not yet been systematized to the same degree as that for monographs; however, what is described here is now fairly typical.) In general, those serials requests not satisfied from University of Washington resources will next be checked against regional serials lists, and locations recorded on the blue workslip now used for advanced serials searches. If fewer than two locations result from consulting these lists, further regional lists will be consulted, and eventually extra-regional and specialized serials lists when necessary. If at any point there arises doubt concerning the accuracy of the citation on the request, the Union List of Serials and/or New Serial Titles will be consulted for verification and/or locations. If the title is not listed in these sources further bibliographic work may be required to verify the citation. This may involve consulting various periodical directories or other bibliographic resources. When bibliographic data is verified, various techniques of advanced searching for locations may be applied. These most frequently consist of inquiries to specific libraries (including the Library of Congress) via teletype or telephone.[10]

9. Report to the requesting library is made at this point (see footnote 11)
10. In the case of "rush" requests, telephone calls are made routinely to determine whether the material is available and can be copied or loaned immediately.

In the case of requests referred to the Library of Congress for locations, the request form is placed in the union file of requests satisfied and in process, filed in numerical order by transaction number, and a flag is attached to the form to indicate the request is still in process and awaiting a reply.[11] When a reply is received, the request is forwarded to a lending library and the asking library is so advised. If there are no locations, PNBC may ask the Library of Congress to circularize for the material, depending on its nature and the urgency of the user's need. If this is done a report to this effect is sent to the borrower; otherwise a report will be sent informing him that no locations have been found and the search is being abandoned.

Subroutine F: Searching for New Imprints (1970-72).

For newly published materials, the search process is somewhat different.[12] When first reassignment is made, these will usually be checked in some of the same resources described in subroutine D, since the Oregon State Library and King County catalogs include many recent (i.e., 1971) imprints. Beyond this, they will usually be checked against the card supplement (for Post-July 1971 acquisitions) to the WSU catalog, and the file of newly-received cards supplementing the PNBC catalog. If this results in no locations, the search supervisor then attaches a green "problem" search workslip and indicates that Books in Print (or Forthcoming Books, or both) should be checked. The searcher checks the

11. This also represents a departure from routine described on the flowchart. It is now standard practice for PNBC to send a report to the asking library at this point, advising that the request has been referred to the Library of Congress (or elsewhere) and that a further report will be sent when a reply is received. A new reporting form has been devised for this purpose.
12. In general, this applies to post-1970 imprints. The above account applies to current practice based on revisions in procedure made as a result of this study. Procedure described on the flow charts represent practice followed at the time the study was undertaken.

appropriate source, records whether the item is in print, and if so, the price and any other pertinent data. The search supervisor then decides whether to ask the borrowing library to purchase it (e.g., in the case of fiction or inexpensive paperbacks); to request purchase by a state library; or to continue the search outside the region, in which case subroutine D is followed. Usually a recommendation for purchase will be made.[13] In some instances, large regional libraries whose holdings are not recorded in PNBC (Sno-Isle, Fort Vancouver) or other more specialized libraries, will be telephoned to determine whether they have the requested material.

Subroutine G: Clerical Processing of Outgoing Requests.

This is the endpoint of all searches. Requests are taken from the typing file by the clerks, locations are typed on the request form in ranked order, and the address of the first library location is stamped in the address box using the Addresserprinter. The last copy of the request is detached and stapled to the workslip(s).[14] Requests are then sorted for mailing, envelopes are stuffed, and statistics of outgoing requests recorded.[15] Mail is weighed and metered and dispatched or taken to the post office.[16] Last copies of requests, with work records attached, are then filed in the union file of requests satisfied or in process.

13. This is now done on a new form designed for the purpose including all pertinent bibliographic data and requesting a report be sent to the asking library regarding any action taken by the state or other library to whom purchase has been recommended. This practice is a response to the concern of the PNBC Board of Directors for developing regional library resources.
14. PNBC is encouraging the use of a 6-part request form, which allows retention of a file copy with the work record. When the 6-part form is not used it is necessary to photocopy the request form to obtain a file copy.
15. Since the daily log is no longer kept, this must be done at an earlier point, prior to mailing.
16. The step on the flowchart describing "logging out" no longer applies, due to the changed system of record keeping.

Flowtimes in minutes were obtained for each subroutine described above by having each employee record the actual activity time in a daily log. The average times for each individual were joined with comparable salary data in order to compute the average cost of each subroutine.

A standardizing factor of 35% for unproductive time was added to the cost of each subroutine. This includes such activities as coffee breaks, meetings, instruction, personal telephone calls, idle chatter and personal time. Because unproductive time is difficult to measure accurately by direct time observations or diary data, 35% is used as most closely approximating standard industrial engineering practice for technical processing of data. In addition to collecting time and cost data the volume of requests processed for each subroutine was determined. This provided the basis for fixing the proportion of all requests processed during each subroutine. The findings of these analyses are summarized in Exhibit IV-2.

Exhibit IV-2

Direct Labor Costs for Processing Requests
at
PNBC[1]

	Subroutine	Sample Size	Time in Minutes	Direct Labor Cost	Proportion of All Requests	Prorated Cost
A	Clerical Processing of Incoming Requests	551	1.182	.0873	1.000	.0873
B	Searching for Routine Requests	1,358	4.02	.4523	1.000	.4523
C	Requests filled by Photocopying	203	18.45	2.1925	.149	.3267
D	"Problem" Monographs	321	49.0	5.3935	.094	.5070
E	"Problem" Serials	87	53.15	7.3204	.064	.4685
F	New Imprints	192	5.04	1.7621	.141	.2485
G	Clerical Processing of Outgoing Requests	506	2.2	.1351	1.000	.1351
	TOTALS	3,218	18.8693[2]			$2.2254

1. Direct salaries only, supervision and benefits excluded.
2. Mean time per request.

Note: Searching costs are calculated for FY 1973 projections in Appendix Exhibits A-8 and A-9.

The great variation in time and cost - a factor of the difficulty of the request - is immediately apparent. The simplest search rountine (A-B-G) requires 7.4 minutes and costs about 67 cents. A "problem" serials search (A-B-E-G), on the other hand, requires, on the average, 60.5 minutes and costs $8.00. The mode and mean direct labor costs per request are $0.67 and $2.2254 respectively. The mode and mean labor time per request are 7.4 minutes and 18.8693 minutes respectively.

CHAPTER V

DISPOSITION OF REQUESTS

Exhibit V-1 records the distribution of all requests processed by PNBC and forwarded to potential lending libraries for the period July-December 1971.

Exhibit V-1

Distribution of Requests Sent to Lending Libraries by PNBC
July - December 1971

Library	Requests To	Percent of Total	Cumulative Percent
Seattle Public (Wa)	958	10.33	10.33
Washington State Library	940	10.13	20.46
University of Washington	641	6.91	27.37
Oregon State Library	552	5.95	33.32
Tacoma Public (Wa)	551	5.94	39.26
Everett Public (Wa)	485	5.23	44.49
University of Oregon	441	4.75	49.24
Spokane Public (Wa)	367	3.96	53.20
Library Assoc. of Portland (Or)	328	3.54	56.74
University of Puget Sound (Wa)	305	3.29	60.03
Pacific N.W. Health Sciences (Wa)	285	3.07	63.10
Oregon State University	243	2.62	65.72
University of British Columbia	219	2.36	68.08
University of Idaho	216	2.33	70.41
Gonzaga University (Wa)	175	1.89	72.30
Boise Public (Id)	172	1.85	74.15
Reed College (Or)	168	1.81	75.96
Vancouver Public (BC)	121	1.30	77.26
Idaho State University	117	1.26	78.52
University of Montana	115	1.24	79.76
Whitman College (Wa)	101	1.09	80.85
Montana State University	79	.85	81.70
University of Oregon-Medical Sch.	79	.85	82.55
Willamette University (Or)	66	.71	83.26
Timberland Regional (Wa)	53	.57	83.83
Other Libraries Within Region	349	3.76	87.59
Libraries Outside Region	1151	12.41	100.00
Totals	9277	100.00	-

Statistical data maintained by the center staff and summarized monthly provided the basis for the following area distribution of requests from PNBC.

Exhibit V-2

Area Distribution of Requests from PNBC
July 1971 - April 1972

Area	Requests by PNBC to Lending Libraries	
	Number	Percent
Alaska	8	.03
Idaho	1,041	4.12
Montana	507	2.01
Oregon	3,299	13.07
Washington	8,836	35.01
British Columbia	724	2.87
Pacific N.W. Health Sciences Reg. Lib.	423	1.68
Filled by photocopy from University of Washington materials	3,883	15.38
Regional Subtotal	18,721	74.17
Outside Region	2,255	8.93
Unable to Provide Locations	4,264	16.89
GRAND TOTAL	25,240	99.99

The predominance of requests to loan placed on the Washington libraries is evident. Seven of the top ten lenders are libraries within Washington, and they and others in the State contribute more than 50% of the loans.

The high rate of fills by photocopy is important. It should be noted that this service is a successful response made <u>directly</u> to the requesting library and avoids the more time-consuming (and overall more costly) procedure of transmitting the request to a potential lending library and of asking that library to retrieve copy and mail material to the requesting library.

It should also be noted that during the period July 1971 - April 1972, about 9% of the requests had to be satisfied by libraries outside the region and that about 17% of the requests were not satisfied at all.

Significant improvement in both these categories is expected as a result of the Center acquiring, in May 1972, the microfilm records of the holdings of several academic libraries.[1]

Approximately 27% of the requests received were for printed materials in serials. The fill rate for these requests was a high 95%, of which 55% were filled by photocopy.

The elapsed processing time within PNBC was studied by analyzing 1,139 requests. Findings are summarized in the following table.

Exhibit V-3

Elapsed Processing Time Within PNBC
in
Working Days

Working Days Elapsed	Number of Requests	Percentage	Cumulated Percentage
0	427	37.49	37.49
1	310	27.22	64.71
2	134	11.76	76.47
3	91	7.99	84.46
4	35	3.07	87.53
5	43	3.78	91.31
6	12	1.05	92.36
7	8	.70	93.06
8	9	.79	93.85
9	9	.79	94.64
10	8	.70	95.34
11-105	53	4.66	100.00
TOTALS	1,139	100.00	--
Mean elapsed time - 2.57 working days			

1. Appendix Exhibit A-1

Almost two-thirds of the requests received are processed within 24 hours. Three-fourths of all requests are completed within 48 hours of receipt.

The "problem" requests, i.e., those requiring more than 2 days to process, are not only time-consuming but as Exhibit IV-2 revealed, also very expensive. An examination of the characteristics of these problem requests was made. The results are summarized in Exhibit V-4. Note that the characteristics are <u>not</u> mutually exclusive.

Exhibit V-4

Characteristics of "Problem" Requests

Sample of 410 Titles

Characteristics (not mutually exclusive)	Percent of Incidence
Monographs	78.29
Serials	21.22
Phonorecords	.49
Have locations within region	42.99
Have locations outside region	40.65
Verified but no locations found	18.46
Could not verify	3.41
Main entry defective	22.20
Only locations will not loan	3.90
Located in NW library not in PNBC's records	1.71
New imprints (1970-71)	3.17
"Uncommon" title	1.95
Variant title found	2.68
Genealogy/local history	5.61
No apparent reason for "problem"	11.22

The locations obtained for these "problem" requests are summarized in the following table.

Exhibit V-5

How "Problem" Request Locations Were Obtained

Sample of 410 Titles

How Obtained (not mutually exclusive)	Percent of Incidence
Union catalog within region	24.63
Union catalog outside region (previously searched)	3.41
NUC/LC	7.80
Mansell	7.32
Union list of serials	5.61
New serial titles	4.39
University of Washington catalogs	18.54
LC register	3.17
Teletype to California	4.88
Teletype to LC	7.07
Telephone calls	1.46
Serials, holdings list	2.68
Other or not indicated	7.56

A comparison was made between "no location" (unfilled) requests and those for which locations could be found. Both groups were very similar in respect to the age and subject content of the requests. However, the unfilled requests were judged to be of a more technical or esoteric nature. The only striking difference between the two groups was the greater incidence of foreign language titles among the unfilled--19.18% vs. 7.39%.

The origins of unfilled requests (by library type) were compared with the origins of all requests received. As Exhibit V-6 indicates, requests from academic libraries seem to be somewhat more difficult to fill than requests from others.

Exhibit V-6

Requests Received vs. Requests Without Northwest Locations

Type of Library	Pct. of All Requests Received	Pct. of All Requests Having No N.W. Locations*
Academic	38.19	46.72
Public	47.41	45.08
State	9.44	3.28
Special	3.30	3.28
Other	1.66	1.64
Totals	100.00	100.00

* Sample of 122 requests

In order to determine the degree of success experienced by libaries in receiving the library material they requested through PNBC, a questionnaire was distributed to 102 libraries using the Center's services. Each of the libraries was asked to record whether the requests listed on the form had been filled by the arrival of material from the lending library, and if so, when. Responses were received from 95 libraries.

The requests relevant to those libraries totaled 331. Of these, materials were received which satisfied 277 requests (83.69%). The elapsed time between the mailing of the request from PNBC to a potential lending library and the arrival of the material in the original requesting library for each of the requests is presented in Exhibit V-7.

Exhibit V-7

Elapsed Time Between PNBC's Forwarding of Requests
and the Arrival of Materials in the Requesting Library

Days Elapsed	Number of Requests	Percentage of Total	Cumulated Percent
1	2	.72	.72
2	7	2.53	3.25
3	11	3.97	7.22
4	16	5.78	13.00
5	15	5.42	18.42
6	26	9.39	27.81
7	39	14.08	41.89
8	21	7.58	49.47
9	12	4.33	53.80
10	22	7.94	61.74
11	12	4.33	66.07
12	14	5.05	71.12
13	7	2.53	73.65
14	2	.72	74.37
15	6	2.17	76.54
16	3	1.08	77.62
17	5	1.81	79.83
18	2	.72	80.15
19	14	5.05	85.20
20	3	1.08	86.28
21	2	.72	87.00
22	2	.72	87.72
23	4	1.44	89.16
24	3	1.08	90.24
25	4	1.44	91.68
26	1	.36	92.04
27	2	.72	92.76
28	1	.36	93.12
29	2	.72	93.84
30			
31			
32	2	.72	94.56
33-125	15	5.42	99.98
Total	277	99.98	99.98

Mean Elapsed Time - 13.56 days

The reasons why materials were not ultimately received by the requesting library were also queried by research study staff. The responses made by these libraries were based on status reports received from the potential lending libraries.

Exhibit V-8

Reasons Stated for Non-Receipt of Materials

Reason	Number of Requests	Percentage
Item missing or not owned	19	35.19
Item not for circulation	11	20.37
Request cancelled	4	7.41
"Not our request"	2	3.70
Photocopy provided	2	3.70
Error of lender, still waiting	1	1.85
No explanation	15	27.78
Totals	54	100.00

CHAPTER VI

MAINTENANCE OF UNION CATALOG

The growth in the number of main entry cards received from reporting libraries by PNBC during the last 20 years is recorded in the following table.

Exhibit VI-1

Main Entry Cards Received
from Reporting Libraries
by PNBC
1953-1972

Fiscal Year	Number of Cards Received
1953	101,176
1954	103,507
1955	128,618
1956	122,838
1957	125,349
1958	131,690
1959	133,236
1960	143,172
1961	150,642
1962	147,434
1963	148,878
1964	171,699
1965	160,966
1966	192,746
1967	193,731
1968	219,352
1969	269,137
1970	261,429
1971	290,862
1972	425,350*

*Estimate; 393,543 through May '72

The significant increase in cards received for 1969-1971 was due largely to expansion of acquisition and cataloging efforts at the University of British Columbia. The abrupt upswing during FY 1972 was due to the addition of the holdings, either partial or complete, of 6 libraries

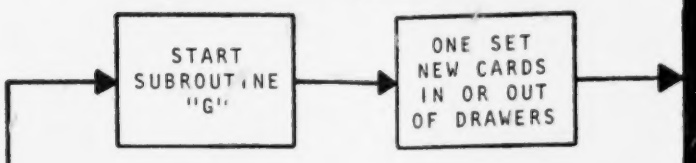
to the bibliographical records of the Center. These were the libraries of Washington State University, the University of Alaska, Western Washington State College, Central Washington State College, Eastern Washington State College and the Montana State Library.

A flowchart of the Center's card filing routines along with withdrawal procedures is presented in Exhibit VI-2. Reference to this exhibit may assist the reader in interpreting the following summary description. Again, the procedures were those in effect as of January 1, 1972. Changes made since are described in footnotes. As of this writing, filing had been drastically curtailed. The increased searching workload, plus several staff terminations, had necessitated assignment of all personnel to the searching effort most of the time.

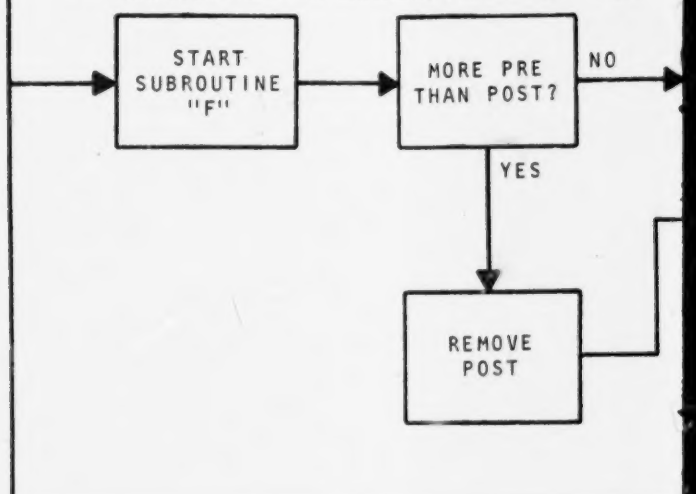
When new cards are received to be added to the PNBC catalog, the packages are immediately unwrapped and the origin noted. If no packing slip stating the total number of cards in the shipment is received, it is then necessary to measure the cards to estimate the total number shipped and record this in the statistics. Once this has been done, the cards are checked to determine whether they are stamped with the originating library's location code. If they are not, PNBC personnel must then stamp each card with the location code.[1] Coded cards are then checked against the list of eleven libraries for whom PNBC reports locations of post-1956 imprints to the National Union Catalog.[2] Ordinarily, any cards to be forwarded are separated according to imprint date

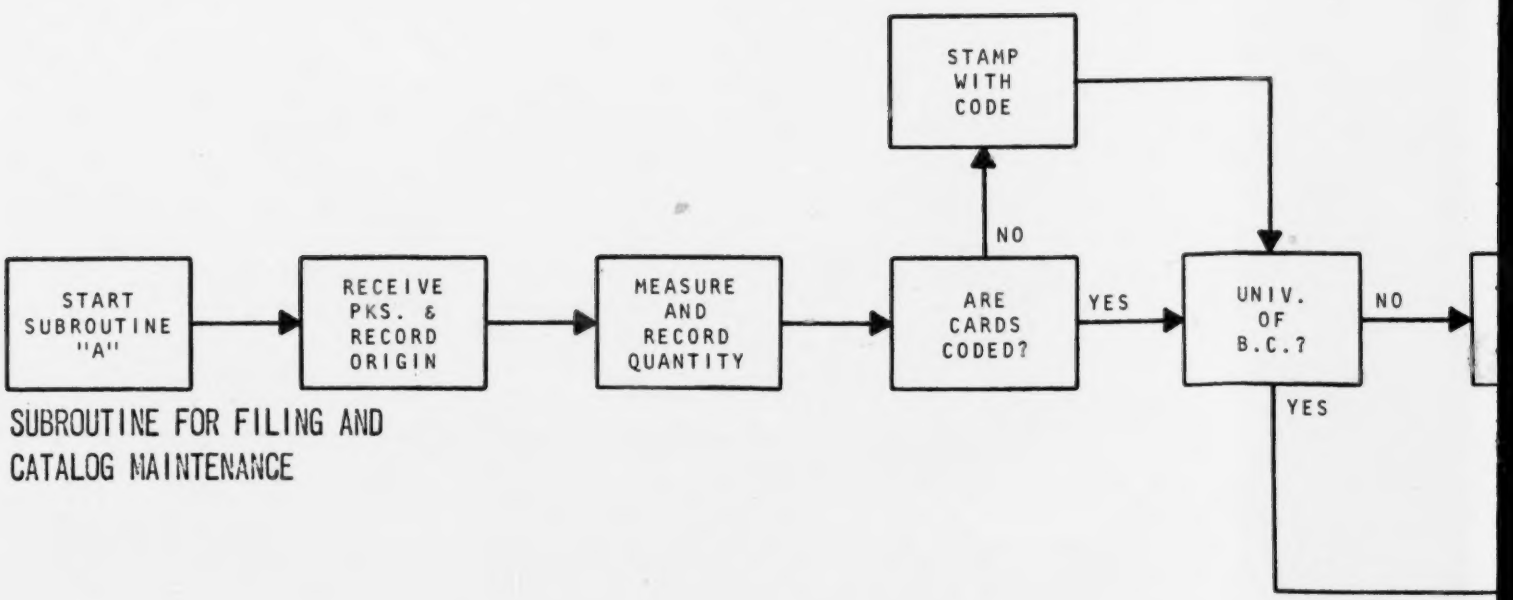
1. Since this is a time-consuming and costly process, libraries are expected to code their cards before shipping.
2. This procedure has been discontinued.

"G" SUBROUTINE FOR CHRONOLOGICALLY DIVIDED DRAWERS UNPROCESSED FOR PRE '56



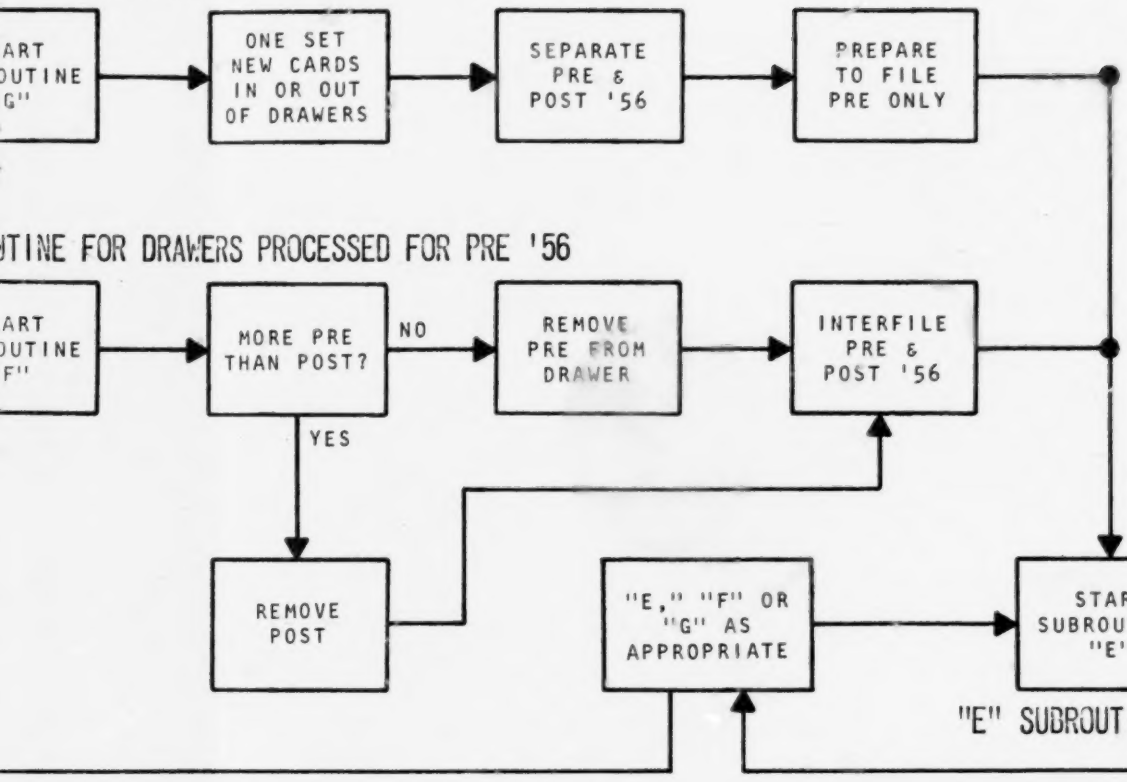
"F" SUBROUTINE FOR DRAWERS PROCESSED FOR PR



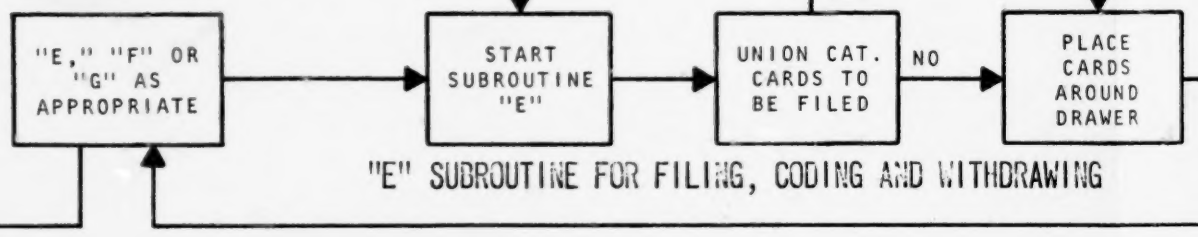


"A" SUBROUTINE FOR FILING AND CATALOG MAINTENANCE

UTINE FOR CHRONOLOGICALLY DIVIDED
RS UNPROCESSED FOR PRE '56

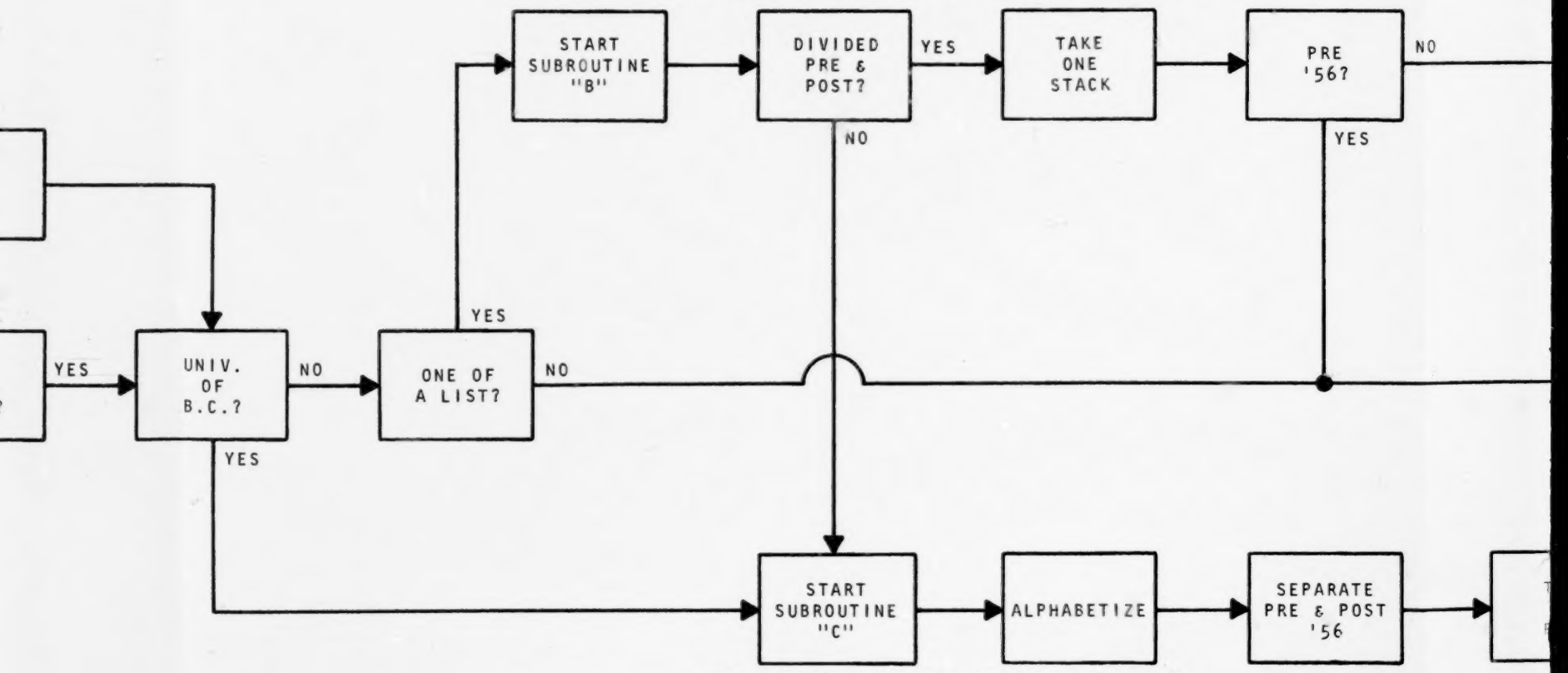


UTINE FOR DRAWERS PROCESSED FOR PRE '56



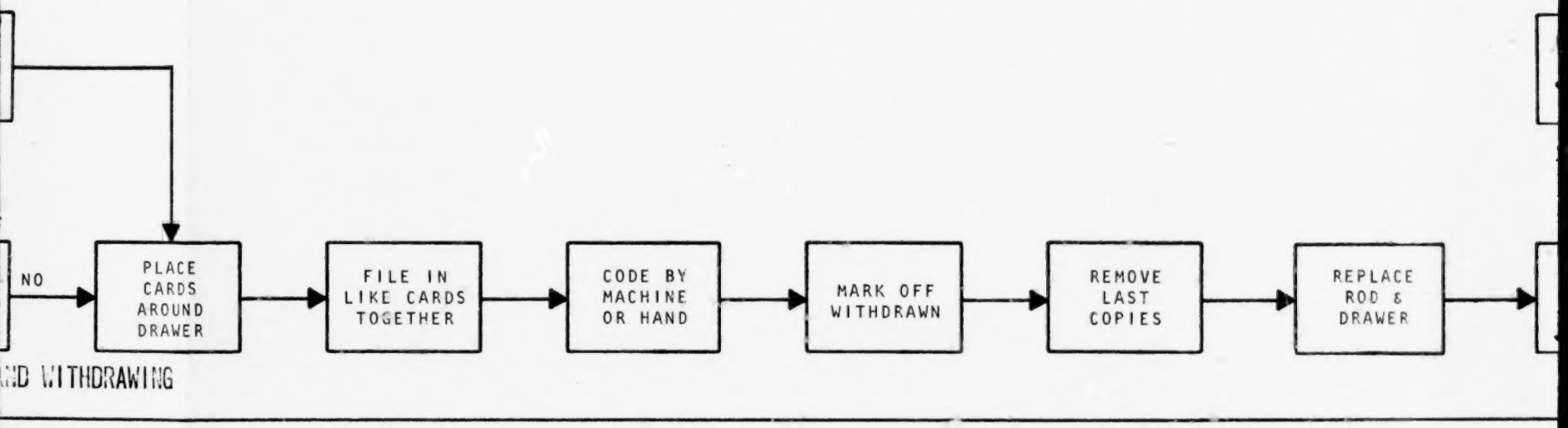
"E" SUBROUTINE FOR FILING, CODING AND WITHDRAWING

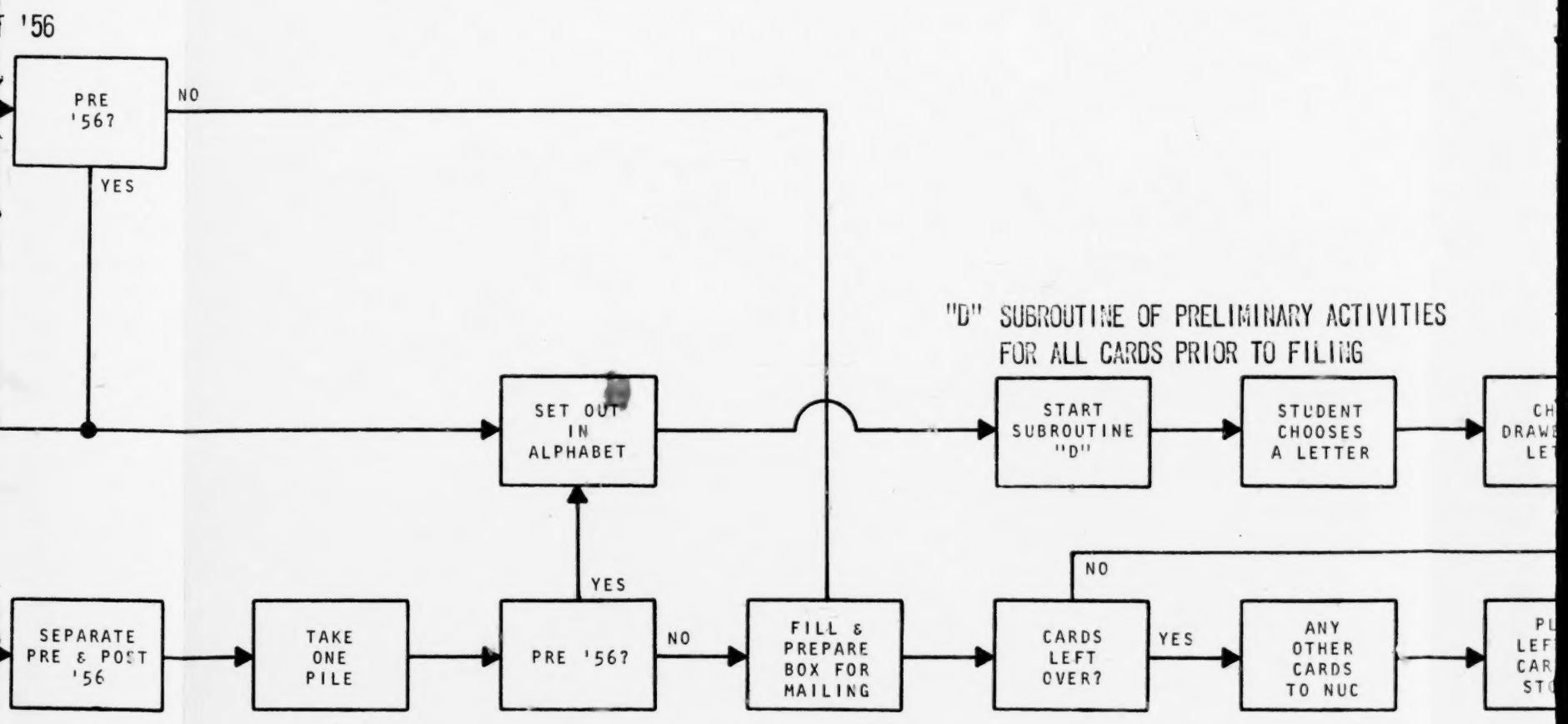
"B" SUBROUTINE FOR CARDS ALPHABETIZED AND DIVIDED PRE AND POST '56



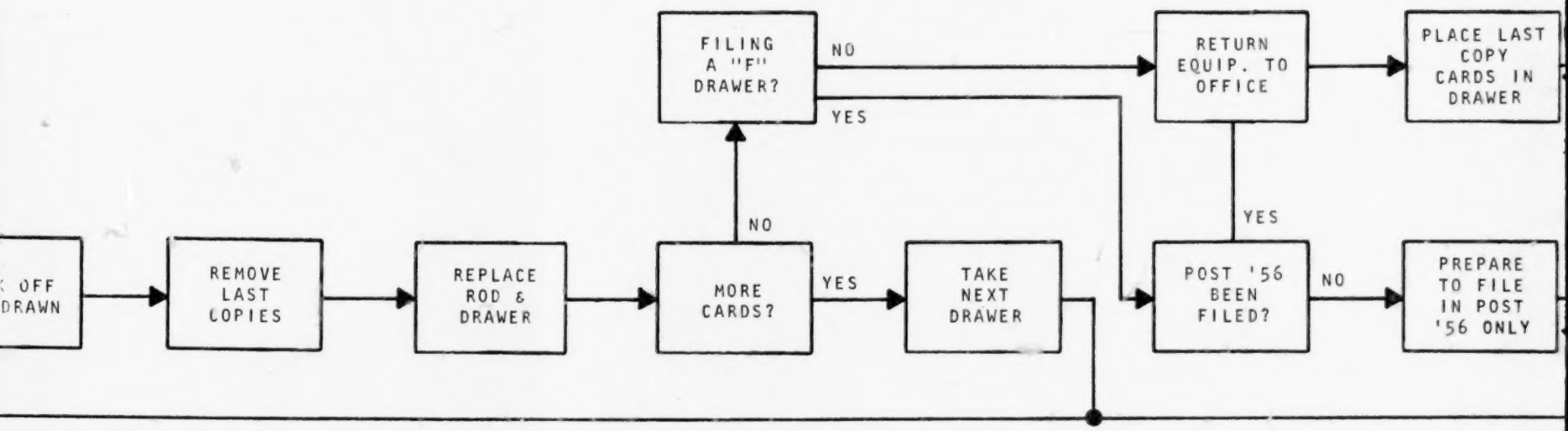
"C" SUBROUTINE FOR UNALPHABETIZED CARDS

PACIFIC NORTHWEST BIBLIOGRAPHIC CENTER
FILING ROUTINE

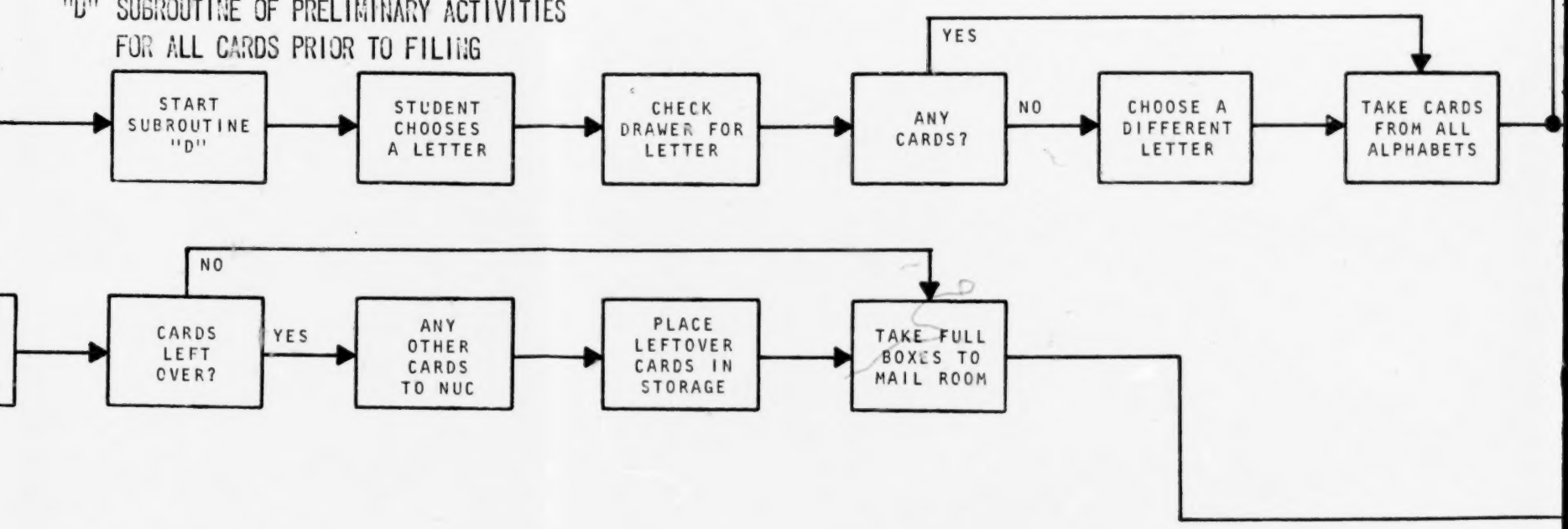




EXHIBIT



"D" SUBROUTINE OF PRELIMINARY ACTIVITIES
FOR ALL CARDS PRIOR TO FILING



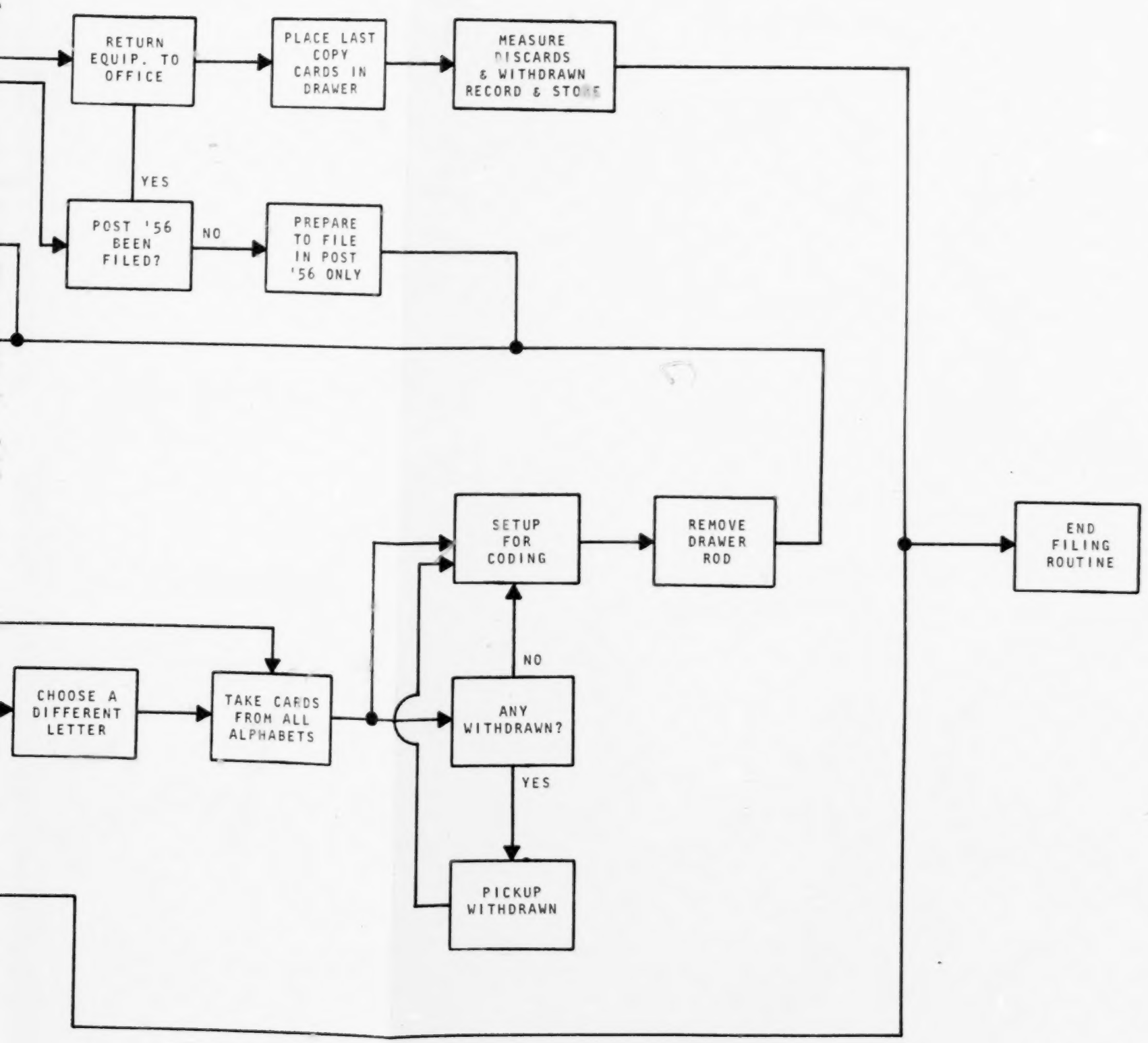

RETURN EQUIP. TO OFFICE
PLACE LAST COPY CARDS IN DRAWER
MEASURE DISCARDS & WITHDRAWN RECORD & STORE
YES
POST '56 BEEN FILED?
NO
PREPARE TO FILE IN POST '56 ONLY
SETUP FOR CODING
REMOVE DRAWER ROD
END FILING ROUTINE
CHOOSE A DIFFERENT LETTER
TAKE CARDS FROM ALL ALPHABETS
NO
ANY WITHDRAWN?
YES
PICKUP WITHDRAWN

EXHIBIT VI-2

(i.e., pre-1956 from post-1956) before sending to PNBC. If they are not, then the separating must be done by PNBC staff. Once the separation is completed any unalphabetized cards must be alphabetized by main entry.[3] This is done in the following manner: cards are first sorted into piles for each initial letter of the main entry, using a large cardboard sorter which is marked off into squares, each square representing a letter of the alphabet. The resulting piles of cards (e.g., all entries beginning with "A") are then alphabetized individually, and put together in one continuous alphabet. Post-1956 cards are then packed in boxes and wrapped for mailing.[4]

Cards which are to remain in PNBC are handled as follows. After cards are alphabetized, the filer takes a packet of cards from some part of the alphabetical file of pre-sorted cards in the PNBC office[5] (normally these will all be entries beginning with the same letter), and goes to the card catalog drawer containing other entries for the part of the alphabet to be filed. The filer then gathers all cards from any separate alphabets that may be filed in the front of the catalog drawer (i.e., new cards to be interfiled, or cards for items withdrawn from library collections).[6] The first catalog drawer to be filed into is removed, the rod is taken out,[7] and cards and coding equipment are laid out

---

3. Again, libraries are urged to do this before shipping to PNBC to cut down on the amount of handling done by PNBC.
4. This forwarding of cards has been discontinued due to excessive cost, long absence of cards from PNBC's records, and objection by LC to this method of reporting. As of July 1, 1972, all libraries will forward their cards directly to NUC.
5. This file represents the current filing backlog of new cards. These will normally consist of a number of alphabets for each letter, arranged in order to allow searchers to consult them when necessary.
6. Small alphabets of new cards and/or cards from the former supplementary catalog are still filed at the front of most drawers in the catalog.
7. Rod is no longer removed each time cards are filed in a drawer. The cards are dropped by removing the rod only after a sufficient number (according to the judgment of the filer) have been placed in a drawer. The purpose of this change was to save time.

preparatory to coding.[8] Cards are interfiled, with like cards gathered together. The best example is selected for coding, the cards coded by machine, any withdrawn locations are crossed out and new locations underlined.[9] Cards are then filed, the rod replaced in the drawer, and the drawer is put back in the catalog. This routine is repeated until all cards are filed.

A separate subroutine is required for filing into drawers containing cards already processed for inclusion in the National Union Catalog of Pre-1956 Imprints, (Mansell) in which pre- and post-1956 imprints have not yet been interfiled.[10] If the invididual drawer contains more pre-56 imprints than post-56, the post-56 portion is removed and interfiled in the pre-56 portion. If there are more post-1956 imprints, this procedure is reversed.

A third subroutine is followed for catalog drawers containing the latter portion of the alphabet which have not yet been processed for Mansell.[11] Such drawers are chronologically divided, and this division will be maintained in the filing procedure until PNBC's part in the

---

8. Coding is done with an automatic coding machine from Pitney-Bowes, an adaptation of the Addressprinter. Codes are printed on the card, and the coder/filer underlines those codes for libraries holding the book described on the card.
9. Currently, no coding is being done due to the scarcity of personnel time available for filing.
10. PNBC is still in the process of duplicating (by Xerox) all cards for pre-1956 imprints for inclusion in the pre-1956 project. After photocopying, the original cards are mailed to the Library of Congress; the Xerox copies are then refiled in the PNBC catalog. At present, each catalog drawer from Mc-Z is divided into pre-1956 and post-1956 sections to facilitate the Mansell Project. As each letter is completed, the contents of the drawers are interfiled, into one alphabet.
11. At present this constitutes M to Z.

Mansell project is completed. In this subroutine, the new cards to be filed are first separated into pre- and post-1956 imprints, and each group is interfiled into the appropriate section of the file drawer.

Flowtimes were obtained for each filing subroutine, using methods described in the preceding chapter. Again a standardizing factor of 35% for unproductive time was added to the cost of each subroutine.

As Exhibit VI-3 reveals, subroutine E is the most time-consuming and expensive filing activity. The comparison of titles to determine whether or not there is an exact match is the dominant cost here, but, it should be noted that coding itself also contributes significantly to the more than 1 minute and 20 seconds required for this subroutine.

The necessity of alphabetizing cards not so received (subroutine C), even though this accounts for only 35% of the shipments, adds 30 cents to the average total cost of filing 100 cards.

Exhibit VI-3

Direct Labor Costs for Filing Cards
in PNBC's Union Catalog[1]

	Subroutine	Sample Size	Time in Minutes per 100 Cards	Direct Labor Cost per 100 Cards	Proportion of all cards Received	Prorated Cost
A	Receipt and Preliminary Sorting	45,027	1.0328	.0170	1.00	.0170
B	Alphabetized and Divided Pre & Post '56	1,380	1.485	.0802	.65	.0521
C	Unalphabetized Cards	9,084	23.0	.8464	.35	.2962
D	Preliminary Activities for all Cards	13,312	1.485	.0802	1.00	.0802
E	Filing, Coding and Withdrawing	2,491	121.50	3.3594	1.00	3.3594
F	Drawers Processed for Pre'56	1,515	15.7	.4142	.15	.0621
G	Drawers Unprocessed for Pre '56	5,037	5.80	.1823	.60	.1094
	TOTALS	77,846	138.8681[2]			3.9764

1. Direct salaries only, supervision and benefits excluded
2. Mean time per 100 cards

NOTE: Costs for filing are calculated for FY 1973 projections in Appendix Exhibits A-8 and A-9.

CHAPTER VII

PNBC USERS -- A SURVEY OF POLICIES, PRACTICES AND OPINIONS

In January 1972, a questionnaire was mailed to 114 academic, public and special libraries within the Pacific Northwest requesting information on a broad range of interlibrary loan related policies and practices. Ninety-five libraries (83%) completed and returned forms.

Ninety-five percent of respondents reported using the services of PNBC in filling interlibrary loan requests. Four of the five non-users provided an explanation stating that they were not members or that PNBC services are "too expensive for our small budget." These libraries are in fact eligible for service since their state library agencies make payment for all libraries within the state.

Thirty percent of those reporting route requests to PNBC immediately after determining that the wanted item is not in their own library and without themselves conducting a bibliographic search or requesting the item from another library. The majority of the other 70% route their requests immediately to a state library. The remainder, mostly university, four-year college and special libraries, conduct a search for locations before forwarding the request.

Use of the state library for interlibrary loans follows a predictable pattern. Almost all public libraries use the state libraries as their first requesting point. (Oregon provides an exception in that the availability of the Oregon State Library's book catalog allows public libraries to contact PNBC directly if the OSL catalog does not show ownership.) About 50% of community colleges normally route requests through the state library. Only 18% of university, four-year college and special libraries regularly route through the state library.

The responses to detailed requests for statistical information on handling interlibrary loan requests were generally sparse and inconsistent, revealing that no library questioned maintained data in comprehensive summary form. Consequently, the data provided is of the "best guess" variety and should be interpreted cautiously. An analysis of the reported average elapsed time between placing a request and the receipt of the wanted material established a median time of 16 days, books requiring 23 days and photocopy requests 12 days. However, the range of elapsed time was reported from 3 days to 4 months. On the other hand, when asked how long it took them to respond to a request, 60% claimed response within one day, and 86% reported an average response time of less than 3 days.

Collectively the responding libraries reported sending 17,192 requests to PNBC during 1971. This comprises about 70% of the total requests received by PNBC in calendar 1971. The collective fill-rate for these libraries was 83% but, again, reporting varied so widely as to cast doubt on the estimations. For example, a small public library in Oregon reported a fill rate of only 54% while a large public library in Washington reported that 100% of its requests were satisfied.

Item number eight of the questionnaire asked: "When an interlibrary loan request is received via PNBC with several library locations indicated and your library's copy is out, missing, or otherwise unavailable to you, do you:

a. routinely forward the request to the next location listed?_____

b. return the request form to the originating library?_____

c. other (please specify)_____"

Fifty five percent of those libraries responding to the question

reported that they "return the request form to the originating library."

Libraries were asked to indicate what "services PNBC might perform for libraries in the Northwest Region which it is not now performing." Four suggested services were described and space provided for libraries to describe other services they would like PNBC to render. Libraries were then asked to rank the proposed services in numerical order from 1 to 5 (1, most useful, 2 next most useful, etc.). These services were described as follows:

"a. Expanded bibliographic services. These might include bibliographies on demand; a periodical publication with each issue devoted to a regional bibliography on a selected subject, with Northwest locations given for each item listed; issuing bibliographies of special materials such as films and recordings, periodical holdings, pamphlet collections or other uncataloged materials, etc. in the region.

b. Expanded reference services, involving handling of reference questions which would be referred to PNBC through existing state informational systems.

c. Distribution of data collected by PNBC concerning regional resource weaknesses in bookstocks for use in development of your library's collection.

d. A PNBC "last copies" collection program. This would involve the collection and preservation of the last copies in the region of older imprints (these have often been discarded in the past). Cooperating libraries would box their last copies and rarely used items after "weeding" their collections, and ship them to PNBC."

The ranking of these suggested services is summarized as follows:

Exhibit VII-1

Library Rankings of Suggested PNBC Services

Suggested Service	Percent of Respondents Which Ranked Services 1-5 (Most useful-Least useful)					Mean of Weighted Ranks
	1	2	3	4	5	
Expanded bibliographic services	46.8	17.7	20.3	11.4	3.8	2.076
Expanded reference services	39.0	23.4	10.4	22.1	5.2	2.312
Distribution of PNBC data	21.4	37.5	14.3	25.0	1.8	2.482
"Last Copies" collection program	19.5	29.9	28.6	19.5	2.6	2.558

Thirty-one libraries commented on "other services" which they want from PNBC. Many libraries asked for "more acceptance of telephone requests when time is important to the borrower." Several comments were made on the need for a teletype network between major libraries in the Pacific Northwest with linkage to PNBC. Other comments included: "Add to the PNBC staff a specialist in U.S. Government Publications," "Prepare bibliographies on genealogy," "Provide ILL workshops," "We feel that PNBC should continue to be what it is and no more--a locating agency--a good one!"

One of the large public libraries--one who is both a primary user of PNBC and a major lender to other libraries--responded as follows: "We need more speed in getting requests to the patrons. I feel I am failing most of the time, because so often other libraries seem to take a long time in answering our requests, such as the status of them, etc.

and much time is wasted waiting for replies to questions. I can't understand how a library can take so long to answer unless they are much busier than we. Perhaps they don't have full-time help, or there are hold-ups in the mailing rooms. The patrons get quite discouraged if they have to wait longer than two weeks. I have one patron who has waited about six months! However, that was for a rare book. It would be a great help if we knew what the lending library had in mind when we send a request but do not receive a reply."

Only 25% of libraries responded to a question asking what additional information PNBC could collect that libraries would find useful in improving collection development and management. Suggestions included: "Reliable cost studies of ILL -- Union List of Serials in the Pacific Northwest -- ILL policies of different libraries might be helpful -- Regular checklist of new publications by Northwest authors and about the Northwest, for acquisitions librarians -- Location information on A-V materials similar to the location information now available on printed materials -- None of the above items seem <u>really</u> useful to us. In view of financial problems, prefer that PNBC concentrate on switching-center function and building a more inclusive Union Catalog, and slow-up on these "dreams of glory."

Libraries were asked "Does your library publish a serials holdings list, or contribute to a union list of holdings? If so, please give title of list." Sixty-two percent of respondents reported publishing or contributing to a union list. Thirty two lists were mentioned.[1]

Fifty-three percent (41 libraries) replied that they would be interested in acquiring the catalogs of major research libraries in the Northwest if they were available on microfilm and at a cost within the

1. See Appendix Exibit A-3

library's budget. Forty-five percent (35 libraries) said they would not be interested. Two libraries replied "maybe".

The ability of libraries to use materials in various micro-formats was surveyed as were practices regarding photocopy costs. Responses are reported in Appendix Exhibits A-4 and A-5 respectively.

CHAPTER VIII

SUMMARY, GENERAL DISCUSSION AND RECOMMENDATIONS

A. Summary of Changes/Improvements

We observed in the first chapter that the timing of this study was particularly opportune. Reorganization had occurred recently and the new Director had begun initiating the changes which had been advocated as part of her earlier extensive study of the Center.

This operations research study soon became engrained in the daily operations of the Center and the study's data summaries, flow-charts and analyses became the basis for a stream of procedural changes.

Rather than attempt to determine which of the changes (improvements?) were directly attributable to the study and which would have occurred as part of "normal" adjustments by the new Director, we will simply list the changes which we consider significant and which have occurred since October 1970.

Organization and Administration

The base of financial support has been shifted from individual library memberships to the state library agencies.

Contacts between the director and various state agencies and libraries within the region were increased and deepened.

A more liberal search policy has been enacted which has removed many former restrictions and broadened the range of materials acceptable for search.

The Center assumed a number of costs formerly borned by the University of Washington, e.g. one FTE staff, telephone charges, supplies.

Equipment has been purchased for expanded services, e.g. photocopy machinery, a microfilm camera, microfilm reader/printer, adding and coding machines, a calculator, furniture, etc.

File Organization and Routines

A "catch-up" project was conducted during the summer of 1971 to eliminate the supplementary catalog.

A new coding system has been introduced utilizing a custom designed adaptation of an Addresserprinter.

Photocopy machinery is being used to duplicate cards for the Mansell Pre-1956 NUC, thereby making possible the permanent retention in PNBC of a photocopy of the original card.

Filing routines are undergoing constant analysis and experimentation in order to maximize rapid access and efficiency.

Searching Routines

A transaction number system for the control of requests has been adopted.

After considerable analysis and testing a new, more carefully sequenced and more tightly controlled searching procedure has been initiated.

Three new searching worksheets, each adapted to different strategies of search, are being utilized.

Teletype was installed and used for determining locations outside the region (via LC, California State Library Union Catalog, Rocky Mountain Bibliographical Center, etc.)

New reporting forms and procedures have been implemented.

First steps have been taken to develop library resources in the region by alerting the state libraries to lacunae and providing suggestions for purchase of in-print materials.[1]

Record-Keeping and Statistics

Experimentation was conducted with various economic means of developing an historical record of requests received and their disposition. A six-part request form was adopted with one copy to be retained in PNBC. The retained copies are filed numerically by transaction number with the work record attached.

The Center has begun issuing monthly statistical reports on requests received and forwarded with percentage analyses showing borrowing and lending relationships among five member states. These reports are being mailed to board members and state libraries.

A detailed and cumulated record of requests filled by photocopy is also produced. This serves to document the use made of the University of Washington's collection.

Personnel

The services of a reference consultant were secured for six months to assist with the general reorganization.

An experienced reference librarian has been hired to serve as permanent searching supervisor.

An additional professional librarian was hired as an assistant on the research project and is being retained as a permanent staff member.

---

1. See Appendix Exhibit A-7

New personnel classifications, together with a revised salary schedule, have been adopted to bring position titles and salaries more closely into line with the level of duties performed.

Additional clerical help has been employed to speed up searching, to assist the Director in fiscal and administrative tasks, and to handle the added work-load resulting from the increasing number of requests.

General

A policy has been initiated of photocopying readily available library materials and mailing the copies directly to the requesting library.

The collection of bibliographic materials has been expanded, including the addition of a number of serials holdings lists.

The addition of TWX provides communication with libraries nationwide; a Dataphone adaptation connects PNBC with the Idaho LITTY Network. The University of Alaska and PNBC have pooled finances to operate Telex equipment, providing teletype communication with Alaska and British Columbia.

Telephone services have been expanded, and an increased use is being made of SCAN, WATS and long distance in searching for locations and reporting to libraries.

First attempts have been made to establish access to uncataloged materials by compiling a directory of ERIC collections with a compendium of regional library lending policies; and by acquiring subject bibliographies and records of special collections in the region.

The complete retrospective holdings records of four additional major academic libraries are being added to PNBC. This is being

accomplished through the purchase of microfilming effort. These records are being supplemented by the receipt of cards representing their current acquisitions.

The services of an accounting firm were secured to perform the first audit of PNBC's financial records, and to continue to provide necessary accounting services. An improved bookkeeping system has been developed by the accountants and is now in use.

B. General Discussion and Recommendations

The immense value of PNBC as a major bibliographic resource becomes obvious when one observes the very low incidence of duplication within the Union Catalog. Approximately one-half of the titles represented are available in only one of the more than 40 libraries whose resources are included (Exhibit II-2). Furthermore, the distribution of the total number of titles held by each indicates that any one library would--without PNBC--experience a very low probability in accurately "guessing" which other library within the region might have the title (Exhibit II-3). Continued primary reliance on mail service for interlibrary loaning would mean long delays in getting "do not own" reports and the very inefficient requirement that several libraries would usually have to be contacted before any one request was satisfied. Even with extensive telecommunication interconnections, the inefficiencies of such guesswork would, after a considerable cost, merely be moderated, not eliminated. PNBC certainly provides a unique service.

The distribution of requests received by their imprint dates

(Exhibit III-8) and the additional time and cost of providing locations for new imprints when not first "found" in searching for routine requests. (Exhibit IV-2) indicates that the failure to promptly file newly received cards will reduce the Center's "fill ratio" and increase its costs. While we agree with the policy of concentrating on searching when the volume of requests is great, we believe that even then a minimal effort of filing should be maintained. At such times filers might file only those cards for libraries who have the highest incidence of titles unique to all others (Exhibit II-4).

The researchers believe that while changes in the search routines have improved efficiency and allowed the Center, with only a minor increase in searching man-hours, to respond to a massive increase in demand, that procedures still should be improved.

While 90% of requests are processed within five days after receipt, only 4% are processed within the next five days. We believe that this is a result of long delays between searches when the request merely "sits" in a file. In addition, 5% of the requests stay within PNBC for more than ten days. Again, we feel this is not the result of a search routine of such greater commensurate length but is rather a matter of losing control of the search.

We recommend the following:

1. "Normal" routine searches should be extended through additional file searches such as the WSU microfilm catalog before being assigned "problem" status;

2. Every effort should be made to assign the more experienced searchers to problem searches only;

3. At a predetermined fixed time after the receipt of a request, a searcher should be assigned the responsibility of staying with a request (without returning it to the file) until an end-search decision point is reached and

4. At this point a supervisor should decide where the request is to be routed, i.e. to LC to circularize, to another union catalog or bibliographic center, etc.

While the fixed times of items 3 and 4 above should be set after experimentation, we would suggest five and seven days after receipt to be initial target goals. Even if these changes were to extend slightly the mean elapsed time in process, the prevention of inordinate delays for some 7% of the requests we believe would be worth it.

It is possible with the data from this study to get, for the first time, a profile of the turn-around time for the interlibrary loan process in the Pacific Northwest. This involves the summing of three mean elapsed times as follows:

Elapsed time from date of request to receipt at PNBC (Exhibit III-6)	3.62 days
Elapsed processing time within PNBC (Exhibit V-3)	2.57 days
Elapsed time between PNBC's forwarding and arrival of the material in the requesting library (Exhibit V-7)	13.56 days
Total Mean Elapsed Time	19.75 days

The mean time within PNBC, then, is 13.01% of the total "turn-around-time". The data in Exhibit V-7 reveals quite a difference between the mode (7 days), the median (8 days) and the mean of 13.56 days--caused by the extended tail of the Poisson distribution (to 125 days). However, if we consider the modal times (3 days, one-half day, and seven days) the percentage of total time consumed at PNBC is only 5.88%. The point here--and it is significant--is that PNBC processing time is only a small percentage of the time required for interlibrary loaning.

This consideration, it seems to us, is crucial when one examines the issue of automation at PNBC. If we were to eliminate 99% of the mean time required to process a request at PNBC we would reduce the interlibrary loan turn-around-time by only 12.88%--and this would, of course, be very expensive. But, such a reduction of processing even with the most sophisticated automated systems seems unlikely since we are dealing with a high incidence of defective bibliographic citations in the received requests and a sizable proportion of problem searches. These difficulties, would defy the capabilities of any current machine-based bibliographic search system of which we are aware.

Of course a reduction in turn-around time well in excess of 13% is possible, if libraries can, by remote terminal access, conduct on-line searches of a PNBC machine readable data base. This is considerably more expensive and sophisticated, requiring the solution of problems more likely to be resolved adequately if approached on a national basis.

The use of telecommunication devices linking the major interlibrary loan borrowers and lenders of the region with PNBC has far better prospects. With the regular use of teletype or telefacsimile in transmitting requests to PNBC and from it to the lending library, about four days time

could be saved which would be a 20% reduction in turn-around time. The terminals needed for this are common-place and lease for about $50 a month.

The efforts described above under "Record-keeping and Statistics" reveal that raw and summary statistical data is being maintained and is in some instances published. In addition to this, we would suggest that special studies be made occasionally to test the operational effectiveness of PNBC's services and interlibrary loan processes generally. We would recommend the following:

1. A rank distribution of libraries making most use of PNBC (i.e. Exhibit III-2);
2. A rank distribution of libraries making the most loans in response to requests forwarded from PNBC;
3. A continuing comparison of 1 and 2 above which would provide a check on the degree of success in spreading the "burden of loaning";
4. A periodic survey of elapsed time data within PNBC (Exhibit V-3) as a base measure of internal effectiveness;
5. An occasional survey of the time required for the interlibrary loan procedures preceding and following PNBC processing (Exhibits III-6 and V-7) with an analysis of findings by library so that the Center can catch and report "bottlenecks" in the system.

Many of the responses to the questionnaire (Chapter VII) seemed to indicate that interlibrary loan service is not considered of very high

priority. This judgement is supported by the prevalence of defective bibliographic citations in the requests received at PNBC from libraries both large and small and of all types. In addition, the questionnaire uncovered much ignorance about PNBC policies and operations. We would recommend the following as a course of action targeted on these problem areas:

1. Continued broad involvement of the Director in regional library activities in order to foster a greater awareness of the quality and potential of Center activities;

2. Participation with the state library agencies and others as opportunity provides, in developing and conducting interlibrary loan workshops and training sessions;

3. Publication, on an occasional basis of brochures, pamphlets, fliers, and the like which would be mailed with processed requests and would explain Center and ILL policies and procedures and urge cooperation with them.

The researchers believe that during the last year and a half, the Center, as a result of strong leadership at both the policymaking and administrative levels, has returned to its original function as "an agency of regional library cooperation, both to facilitate the collective exploitation of the existing resources of the region and to foster the future growth of these resources".[1] The Center's success during the last 18 months in greatly improving the efficiency and effectiveness of its operations has resulted in a striking increase in the demand for its services; and these demands show no indication of receding; indeed, the rate of growth continues to expand.

1. Swank, p.2

Our projections for FY 1973 indicate that 500,000 cards will be received from contributing libraries and that 50,000 interlibrary loan requests will be placed with the Center. We are concerned that funds for the support of PNBC be sufficient to cover the costs of satisfying these heavy demands. The rapid increase in volume during the last two years we believe to be an indication of the enormous latent demand for interlibrary loan service which exists in the Northwest. It would be a pity if after these very encouraging recent efforts, PNBC would be unable to cope with the demands on its services which it has helped foster.

We suggest that PNBC, by continuing to emphasize and strengthen the bibliographic services it now offers, is making its most effective contribution to fostering the growth of interlibrary cooperation at the state and regional levels.

A P P E N D I C E S

Exhibit A-1

Libraries With Holdings Recorded in PNBC's Union Catalog

Alaska

University of Alaska, College[1]

British Columbia

Provincial Archives, Victoria

Provincial Library, Victoria[2]

University of British Columbia Library, Vancouver

Vancouver Public Library, Vancouver[3]

Idaho

Boise Public Library, Boise

Idaho State University Library, Pocatello

University of Idaho Library, Moscow

University of Idaho Law Library, Moscow

Montana

Historical Society of Montana Library, Helena[4]

Montana College of Mineral Scinece and Technology Library, Butte

Montana State Library, Helena[5]

Montana State University Library, Bozeman

University of Montana Library, Missoula

---

1. Cards received beginning October 1971 for originally cataloged items and recent acquisitions to Skinner Collection only
2. Last cards received August 1969
3. Last cards received June 1965
4. Last cards received November 1963
5. New acquisitions only beginning October 1971

Oregon

Eastern Oregon College Library, LaGrande[6]

Library Association of Portland

Mt Angel Abbey Library St. Benedict

Oregon College of Education Library, Monmouth[6]

Oregon Historical Society Library, Portland

Oregon State Library, Salem[7]

Oregon State University Library, Corvallis

Oregon State University Institute of Marine Biology Library, Coos Bay

Portland State University, Portland[6]

Reed College Library, Portland

Southern Oregon College Library, Ashland[6]

University of Oregon Library, Eugene

University of Oregon Dental School Library, Portland

University of Oregon Law Library, Eugene

University of Oregon Medical School Library, Portland

University of Oregon Oriental Museum Library, Eugene

Willamette University Library, Salem

Washington

Ben Tidball Memorial Library, Olympia[8]

Central Washington State College Library, Ellensburg[9]

Eastern Washington State College Library, Cheney[10]

Everett Public Library, Everett

---

6. Last cards received November 1967
7. Currently updated by book catalog supplements (non-fiction) and catalog cards (fiction)
8. Last cards received April 1958
9. Cards for recent acquisitions received beginning December 1971. Base holdings on microfilm.
10. Cards for recent acquisitions received beginning January 1972. Base holdings on microfilm.

Gonzaga University Library, Spokane

Seattle Public Library, Seattle

Spokane Public Library, Spokane

Tacoma Public Library, Tacoma

University of Puget Sound Library, Tacoma

University of Washington Library, Seattle[11]

University of Washington Law Library, Seattle

Washington State Library, Olympia

Washington State University Library, Pullman[12]

Western Washington State College, Bellingham[13]

Whitman College Library, Walla Walla

---

11. Not in Union Catalog, but its catalog is available for consultation.
12. Cards for recent acquisitions received beginning August 1971. Base holdings on microfilm.
13. Cards for recent acquisitions received beginning October 1971. Base holdings on microfilm.

Exhibit A-2

Additional Holdings Records in PNBC
Supplementing The Union Catalog and Microfilm Files

I. Other Library Catalogs

King County Library System. Book Catalog. (Adult and Juvenile) Seattle 1972. (21 volumes)

Oregon State Library. Master Book Catalog: Adult Non-Fiction. Salem, 1967. (14 volumes and supplements through December, 1971)

Timberland Regional Library. Book Catalog. (Adult and Juvenile) (15 volumes and supplements through February, 1972)

II. Book Catalogs of Special Collections and Materials.

Central Washington State College. Audiovisual Library Collection (films and recordings).

University of Idaho Library. Basque Collection. 1971; Checklist of Western Americana in the Day-Northwest Collection... 1969; Checklist of theses and dissertations accepted for higher degrees at the University of Idaho through May 30, 1966. 1966; Theses and dissertations submitted to the graduate school during the period June, 1967, through May 15, 1968. (supplement to above).

Public Library Commission, Victoria, B.C., Open Shelf Division. Picture catalog listing reproductions of famous paintings. 1942

List of Latin American imprints before 1800 selected from bibliographies of Jose Toribio Medina microfilmed by Brown University. Providence, Rhode Island, Brown University Library, 1952.

WSL-ILS Films. Washington State Library, 1970.

1970 Washington State Film Catalog.

Washington Newspapers and historical materials on microfilm in the Washington State Library. 1966

Genealogical Material in the Oregon State Library. No date (mimeo)

"County and Local Historical Material in the Ohio State Archeological and Historical Society Library." Reproduced from Ohio Archaeological and Historical Quarterly, Volume 54, no. 3, July-September, 1945.

U.S. Department of the Interior. Bonneville Power Administration Library. Catalog of books in library. 1965

Puget Sound Power and Light Company Library. Book list as of January 1, 1971. (Includes periodical holdings)

The New York State Library. Checklist of books and pamphlets in science and technology. Albany, 1960; Checklist of books and pamphlets in American History. Albany, 1960; Checklist of books and pamphlets in the social sciences... Albany, 1960. (PNBC also has supplements to this for April, 1955-December, 1958)

Tacoma Public Library and Tacoma Community College Library. A selected sample of books by and about American Indians with special emphasis on the Pacific Northwest, a cooperative project. 1970. (Gives TPL and TCC call numbers)

Tacoma Public Library. Japanese-American in the Pacific Northwest, a bibliography prepared by the staff of the Tacoma Public Library found in the collections of the library. 1971.

The newspapers of Tacoma-Pierce County, Washington State: a list and holdings file of the Pacific Lutheran University Library, Puyallup Public Library, Tacoma Public Library, Washington State Historical Society. 1970.

Washington State University, Pullman. Fred C. Ashley, a register of his papers in the Washington State University Library, 1941-1970. 1971; William Compton Brown, a calendar of his papers in the Washington State University Library. 1966; Lon Johnson, a register of his papers, 1912-1966, in the Washington State University Library. 1966; Knute Hill, a register of his papers, 1909-1936, in the Washington State University Library. 1966; Austin Mires, an indexed register of his papers, 1842-1936 in the Washington State University Library. 1968.

Washington State University, Pullman. William Edward Carty, an indexed register of his papers, 1898-1963 in the Washington State University Library. 1967; Walt Horan, a register of his papers, 1943-1965 in the Washington State University Library. 1965; Carl Parcher Russell, an indexed register of his scholarly and professional papers, 1920-1967, in the Washington State University Library. 1970.

University of Washington, Seattle. 1971-1972 University of Washington Audio-Visual Materials Catalog.

III Serials Holdings Lists

In addition to such standard lists as the LC Union List of Serials, New Serial Titles, the World List of Scientific Periodicals and Chemical Abstracts Service Source Index, PNBC has the following:

University of Washington Libraries. Current serials received. 1971

Pioneer Valley Union List of Journal and Serial Holdings: Amherst College, Forbes Library, Hampshire Inter-Library Center, Mount

Holyoke College, Smith College, University of Massachusetts, as of January 1, 1971.

Special Libraries Association, Southern California Chapter. Union list of periodicals in Southern California Libraries. 5th edition, 1968.

San Francisco Public Library. Periodical titles currently received with supplementary list of government periodicals. 1968

Serial publications held by the Marine Biological Laboratory Library and the Woods Hole Oceanographic Institution. 1965

Argonne National Laboratory, Library Services Department. Argonne list of serials. 1965

Linda Hall Library of Science and Technology. Serials holdings in the Linda Hall Library. 1971

The Southwestern Union List of Serials, a regional union list of serial holdings as reported by 30 participating libraries. 1969

Rarely held scientific serials in the Midwest Inter-Library Center. 1963 (PNBC also has a 1964 supplement.)

Four college libraries Union List of Journal and Serial Holdings as of July 1, 1969. (Includes Amerhst, Mount Holyoke, Smith, University of Massachusetts, and Hamshire Inter-Library Center)

Oxford University, Commonwealth Forestry Institute Library. List of periodicals and serials. 3rd edition, 1968.

California State Library. Periodical titles currently received. 1967 (PNBC also has supplement four as of May 1, 1971)

Current periodicals in Seattle Public Library. 1970

Oregon State Library. Periodicals currently received. 1970

Oregon State System of Higher Education -- Oregon State Library Pilot Project Union List of Serials. October 1971

University of British Columbia Library. Serial holdings 1970. 5th edition.

U.S. Department of Commerce, Boulder Laboratories. Reference Handbook of the Boulder Laboratories Library: Part I-Periodicals. 1970

The Pacific Fisheries Experimental Station, Vancouver, B.C. List of Serials in the library... 1951.

The Medical Library Service of the College of Physicians and Surgeons of British Columbia, Vancouver, B.C. Current periodicals list. 1963

Idaho State University Library. Medical periodicals and serials list. Revised 1970

Washington State Library. Directory of serials in Washington State Libraries, 1971

Washington State University, Pullman. Music periodicals catalogued in the Washington State University Library. no date

Washington State University, Pullman. Periodicals held by Washington State University Humanities Library dealing wholly or in part with German language and literature. 1971

University of Idaho Library, Moscow. A Union List of serials in Idaho Libraries together with a checklist of Idaho Serials. Moscow, 1969. 2 volumes.

Southern Oregon Library Federation. Union list of serials to 1969.

Northwest Association of Private Colleges and Universities. Union List of Serials. October 1971

U.S. Department of the Interior, Bonneville Power Administration Library. Periodicals and Serials in the Bonneville Power Administration Library. Portland, 1967.

The Boeing Company Libraries. Union list of serial publications in Boeing Libraries (Seattle Area). 1969.

Battelle Memorial Institute, Pacific Northwest Laboratory. Bound periodical holdings Battelle-Northwest Library. 1967.

U.S. Department of Argiculture, National Agricultural Library. Japanese serial publications in the National Agricultural Library. no date

University of Puget Sound, Collins Memorial Library. Periodical List 1970.

Catholic Library Association, Oregon-Washington Regional Unit. Catholic Periodicals in Pacific Coast Catholic College Libraries, a union list. May, 1942.

Pacific Lutheran University. Pacific Lutheran periodical holdings as of February, 1971 .

Eastern Washington State College Library. Union List of Periodicals in the Spokane, Washington area. 1968

In addition to the above, PNBC also has a number of bibliographies on various subjects prepared by staff members of libraries in the region. These as a rule reflect the holdings of their own libraries. They include a variety of uncatalogued materials, eg., pamphlets, films, and government documents.

Exhibit A-3

Serials Lists To Which Pacific Northwest Libraries Contribute [1]

Union List of Serials
New Serial Titles
Periodicals and Serials, University of Alaska Library
Union List of Periodicals in the Anchorage Area
OSSHE-OSL Pilot Project Union List of Serials
Boeing Union List of Serials
Northwest Association of Private Colleges and Universities Union List of Periodicals
Union List of Serials in Libraries of the Spokane, Washington Area
Union list being developed includes the holdings of the two colleges and public library in Walla Walla County (Wash.)
Union List of Serials in Idaho Libraries
Carroll College Periodical Titles
Wenatchee Valley College Library, Periodicals List
University of Montana Serials Currently Received
North Central Regional Library (Wash.) Magazines on File at Headquarters
Survey of Scientific Journals and Other Works of Importance to Chemists and other Scientists available in the Libraries of Portland, Oregon and Immediate Environs
University of Idaho-Washington State University Union List of Serials, 1963
Periodical Holdings, Willamette University Learning Resource Center
Periodical Holdings, Highline College Library (Wash.)
University of Victoria Serials Holdings Cagalogue
Southern Oregon Library Federation Union List of Serials
Periodical Holdings, Timberland Regional Library (Wash.)
Periodicals Currently Received by the Oregon State Library
Chemical Abstracts Source Index
Pacific Northwest Forestry Library Serials
Periodical Holdings of the Fort Vancouver Regional Library System (Wash.)
Union List of Serials Holdings of Libraries in Great Falls, Montana
Periodical Holdings of the Washington State Library, Washington State Law Library, The Evergreen State College, January 1972
List of Periodicals (Big Bend Community College, Wash.)
Union List of Periodicals in Washington State Library Branches
University of British Columbia Serial Holdings, 1970
Periodical Holdings in Southeast Alaska Libraries, 1969
Boise State College Library List (Title and Subject)

1. As reported by the libraries queried.

Exhibit A-4

Libraries In The Region That Can Use Materials
In Microform

Library	Materials they can use			Copy facilities	
	Micro film	Micro fiche	Micro cards	Micro film Printer	Micro fiche Printer
Alaska State Library	yes	yes	no	yes	yes
University of Alaska, College	yes	yes	yes	yes	yes
University of Alaska, Geo-physical Inst.	yes	no	yes	yes	no
Anchorage Community College	yes	no	no	yes	no
Big Bend Community College	yes	yes	no	yes	yes
Boeing Aerospace Tech. Lib.	yes	yes	yes	yes	yes
Boise Public Library	yes	no	no	yes	no
Boise State College	yes	yes	yes	yes	yes
University of British Columbia	yes	yes	yes	yes	yes
University of British Columbia, Woodward Library	yes	yes	yes	yes	yes
Carroll College	yes	yes	no	yes	yes
College of Idaho	yes	no	yes	no	no
Central Washington State Col.	yes	yes	yes	yes	yes
Columbia Basin College	yes	yes	no	yes	no
Defense Research Establishment Pacific, Victoria	yes	yes	yes	yes	yes
Fort Steilacoom Community Col.	yes	yes	no	yes	yes
Fort Vancouver Regional Library	yes	no	no	no	no
Gonzaga University	yes	*	yes	yes	*
Great Falls Public Library	yes	no	no	yes	no
Helena Public Library	yes	no	no	yes	no

Library	Materials they can use			Copy facilities	
	Micro film	Micro fiche	Micro cards	Micro film Printer	Printer
Highline College	yes	no	no	yes	no
Idaho Falls Public Library	yes	*	yes	yes	yes
Idaho State University	yes	yes	yes	yes	yes
University of Idaho	yes	yes	yes	yes	yes
Jackson County Library	yes	no	no	yes	no
Josephine County Library	yes	no	no	yes	no
Juneau Community College	yes	no	no	no	no
Kitsap Regional Library	yes	no	no	yes	no
Lewis and Clark College	yes	yes	yes	yes	yes
Library Assoc. of Portland	yes	no	yes	yes	no
Linfield College	yes	no	no	no	no
Longview Public Library	yes	no	no	yes	no
Lower Columbia College	yes	yes	no	yes	yes
Mid-Columbia Regional Lib.	yes	no	no	yes	no
Missoula Public & Co. Free Lib.	yes	no	no	no	no
Montana State Library	yes	no	no	no	no
Montana State University	yes	yes	yes	yes	yes
University of Montana	yes	yes	yes	yes	yes
Mount Angel Abbey	yes	no	no	no	no
Nez Perce County Free Library	yes	no	no	no	no
North Bend Public Library	yes	yes	no	yes	no
North Central Regional Library	yes	no	no	no	no
Northwest Fed. Reg. Council Lib.	yes	yes	no	yes	yes
Olympic College	yes	no	no	no	no
Oregon State Library	yes	yes	yes	yes	yes

Library	Materials they can use			Copy facilities	
	Micro film	Micro fiche	Micro cards	Micro film Printer	Micro fiche Printer
Oregon State University	yes	yes	yes	yes	yes
University of Oregon	yes	yes	yes	yes	yes
Pacific Lutheran University	yes	yes	no	no	no
Pacific University	yes	yes	yes	yes	yes
Peninsula College	yes	*	*	yes	*
Pierce County Library	yes	no	no	*	no
Port Townsend Public Library	yes	no	no	yes	no
Portland State University	yes	yes	yes	yes	yes
University of Portland	yes	yes	no	no	no
Puget Sound Naval Shipyard Engineering Library	yes	yes	no	*	*
University of Puget Sound	yes	yes	yes	yes	yes
Richland Public Library	yes	yes	no	yes	no
Rocky Mountain College	yes	no	no	no	no
Seattle Public Library	yes	*	*	*	*
Seattle University	yes	yes	no	no	no
Southern Oregon College	yes	yes	yes	yes	yes
Spokane Public Library	yes	yes	yes	yes	no
Tacoma Public Library	yes	yes	no	no	no
Timberland Regional Library	yes	yes	no	no	no
Umatilla County Library	yes	no	no	no	no
Vancouver Isl. Regional Library	yes	no	no	yes	no
University of Victoria	yes	yes	yes	yes	yes
Washington State Library	yes	yes	no	yes	yes
Washington State University	yes	yes	yes	yes	yes

Library	Materials they can use			Copy facilities	
	Micro film	Micro fiche	Micro cards	Micr film Printer	Micro fiche Printer
Wenatchee Valley College	yes	yes	no	yes	no
Western Washington State College	yes	yes	yes	yes	yes
Weyerhauser Company, Longview	yes	yes	no	yes	no
Whitman College	yes	yes	yes	yes	yes
Whitworth College	yes	yes	no	yes	yes
Willamette University	yes	yes	yes	yes	yes
Yakima Valley Regional Library	yes	yes	no	yes	no

* no information or cannot interpret

The practices of libraries within the region regarding filling interlibrary loan requests by photocopy were also examined. Exhibit VII-3 presents the responses received.

Exhibit A-5

Libraries In The Region That Fill
Interlibrary Loan Requests By Photocopy

Library	Per page charge	Service charge
Alaska State Library	(12)	no
University of Alaska, College	10¢	no
University of Alaska, Geophysical Institute	10¢	no
Anchorage Community College	10¢	yes
Big Bend Community College	10¢	yes(1)
Boise Public Library	10¢	no
Boise State College	10¢	no
Bonneville Power Admin. Library, Portland	5¢	no
University of British Columbia	15¢	no(10)
University of British Columbia, Woodward Library	15¢	no
Camas Public Library	10¢	*
Carroll College	10¢	no
Central Washington State College	10¢	$1.00 for large projects
College of Idaho	10¢	no
Defence Research Establishment Pacific, Victoria	none	no
Fort Steilacoom Community College	5¢	no
Fort Vancouver Regional Library	10¢	no
Gonzaga University	10¢	no
Great Falls Public Library	25¢	no
Helena Public Library	25¢	*

Library	Per page charge	Service charge
Highline College	10¢	no
Idaho Falls Public Library	15¢	*
Idaho State University	5¢	no
University of Idaho	10¢	no(6)
Jackson County Library	10¢	no
Josephine County Library	10¢	no
Juneau Community College	10¢	no
King County Library	none	no
Kitsap Regional Library	10¢	*
Lewis and Clark College	10¢	no
Library Association of Portland	10¢(7)	no
Linfield College	10¢	(11)
Lower Columbia College	5¢	no
Madigan General Hospital -- Special Services Library	5¢	no
Missoula Public and County Free Lib.	15¢	no
Montana State Library	none	no
Montana State University	10¢	$1.00 minimum
University of Montana	10¢	no
North Bend (Ore.) Public Library	10¢	no(13)
North Central Regional Library	10¢(8)	no
Olympic College	10¢	no
University of Oregon	10¢	yes*
Oregon State Library	10¢(2)	(3)
Oregon State University	10¢	no(4)
Pacific University	10¢	$1.00 minimum

Library	Per page charge	Service charge
Portland State University	5¢	no
University of Portland	10¢	*
University of Puget Sound	10¢	50¢ minimum
Rocky Mountain College	10¢	no
Seattle University	5¢	no
Southern Oregon College	10¢	no
Spokane Public Library	10¢	no
Tacoma Public Library	10¢	no
Tektronix Inc., Beaverton, Oregon	none	no
Timberland Regional Library	none	no
Umatilla County Library	10¢	yes(1)
University of Victoria	10¢	yes(5)
Walla Walla Dist., Corps of Engineers	none	no
Washington State Library	none	no
Washington State University	5¢	no
Wenatchee Valley College	none	no
Western State Hospital, Ft. Steilacoom	none	no
Western Washington State College	none	no(9)
Weyerhauser Company, Longview	*	no
Whitman College	10¢	no
Whitworth College	10¢	no
Willamette University	10¢	no
Yakima Valley Regional Library	10¢	*

*No information or uninterpretable

1) No figures given

2) First ten prints free for government agencies

3) $1.00 minimum for mail orders and those requiring billing

4) Send quotation first for orders over $1.00

5) If over $1.00

6) Additional charge only when an invoice is required; borrowing library is notified of this in advance

7) First ten prints free, 10¢ each thereafter

8) First three pages free, 10¢ thereafter

9) No charge at present. If one is imposed, borrowers will be notified in advance

10) If cost exceeds $5.00, estimate is given in advance

11) 10¢ per page for first five pages; over five, $1.00 minimum. Five copies or less free to NAPCU libraries

12) First twenty pages free, 10¢ per page thereafter

13) If volume of demand increases, a service charge may be added

EXHIBIT A-6

PNBC Operations Research Study
Library Questionnaire

Name of Library: _____

Type of Library (Academic, public, industrial, etc.): _____

Name and Title of Person completing questionnaire: _____

Please return this questionnaire no later than _____

1. Does your library make use of the services of PNBC in filling interlibrary requests:

   a. yes____

   b. no_____

2. If answer to above question is "yes",

   a. How many requests to your statistics indicate you have sent to PNBC since the beginning of the current (calendar, fiscal) year? _____

   b. What percentage of your total loan requests for the same period does the above figure represent? _____percent

3. Does your library send requests to PNBC selectively? If so, what types of requests do you ask PNBC to search for, as opposed to those you prefer to handle directly?

   _____

   _____

4. If you answered "no" to question number 1, what are your reasons for not using the services of PNBC? (please be candid!)

5. Which of the following kinds of data on interlibrary lending and borrowing do you keep in your library?

   a. <u>For items borrowed</u>:

      1. Date request originated_____

      2. Borrower's name_____

      3. Author of book or article_____

4. Title of book or periodical_____

5. Where request was sent_____

6. Date request was sent_____

7. Date first report received_____

8. Date material received_____

9. Date cancelled or further action taken_____

10. Number of libraries to which request was sent before material was obtained_____

11. Whether request was filled by photocopy_____

12. Whether request was handled by mail, telephone, or teletype_____

13. Number of requests filled through PNBC_____
Number of other means_____

14. Number of PNBC requests not filled_____

15. Number of PNBC requests filled by libraries outside the NW region_____

b. For items loaned:

1. Original date of request_____

2. Requesting library_____

3. Borrower's name_____

4. Author_____

5. Title_____

6. Date request was received in your library_____

7. Date you mailed material or forwarded request to another library_____

8. Number of libraries to which request was sent before it came to you_____

9. Number of loan requests you receive (or a daily log of these)_____ _____

10. Do you categorize loans by type of borrowing library (i.e., academic, public, special)_____

11. Number of loan requests received that you are unable to fill_____

12. Reasons for not filling these:

    a. Percent missing_____ b. Percent non-circulating_____

    c. Percent checked out_____ d. Other (specify)_____

13. Disposition made of unfilled requests (sent back to original library, forwarded to next library location listed, etc.)_____

14. Number of requests indicating your library as a second choice_____ third choice_____

15. Number of requests routed to you through PNBC_____

6. What routine is followed for handling incoming loan requests in your library? (Please list each step involved in filling a loan request)

7. Approximately how long do you estimate it takes to fill an average loan request in your library? (i.e., time from date request is received to date material is mailed)

    a. 1 day or less_____

    b. 2-3 days_____

    c. 3-5 days_____

    d. more than 5 days_____

8. List factors involved in determining the average time stated above; e.g., longest time lapse from receipt of request and day it is filled; shortest time, etc.

9. When an interlibrary loan request is received via PNBC with several library locations indicated and your library's copy is out, missing, or otherwise unavailable, do you:

    a. routinely forward the request to the next location listed?____

    b. return the request form to the originating library?_____

    c. other (please specify)_____

10. One of the objectives of the present research project is to determine what possible services PNBC might perform for libraries in the Northwest Region which it is not now performing. Following is a list of some possible services. Please indicate which of these you think would be most useful to your library, ranking them in numberical order from most useful to least useful (1=most useful, 2=next most useful, etc.) Your comments are invited.

a. Expanded bibliographic services. These might include bibliographies on demand; a periodical publication with each issue devoted to a regional bibliography on a selected subject, with Northwest locations given for each item listed; issuing bibliographies of special materials, such as films and recordings, periodical holdings, pamphlet collections or other uncataloged materials, etc., in the region.

Rank_____

Comments:

b. Expanded reference services, involving handling of reference questions which cannot be satisfied from local resources. (These would probably be best handled by telephone, via SCAN)

Rank_____

Comments:

c. Distribution of data collected by PNBC concerning regional resources and weaknesses in bookstocks for use in development of your library's collection. This might evolve into one or more cooperative acquisitions programs.

Rank_____

Comments:

d. A PNBC "last copies" collection program. This would involve the collection and preservation of the last copies in the region of older imprints (these have often been discarded in the past). Cooperating libraries would box their last copies and rarely used items after weeding their collections, and ship them to PNBC. These books would be stored in a warehouse, and would be available for loan via request through PNBC.

Rank_____

Comments:

e. Other services you think would be useful to your library (please list and describe).

Rank_____

11. Would your library be willing to pay a fee for any of the above services, e.g., a special bibliography?

yes_____no_____

12. In your opinion, what additional date could PNBC collect that would provide your library with useful information for collection development and management?

13. Does your library keep any statistics on the number of loan requests that are forwarded to you after being sent to one or more other libraries?

yes_____no_____

14. If answer to 13 is "yes", can you tell us:

    a. What number and/or percentage of all the loan requests you receive from other libraries are routed to you by another library that could not fill the request?_____

    b. Of these, how many requests listed your library as a second choice?_____ third choice?_____

    c. How many of the requests on which your library appeared as a second choice were you able to fill?_____

    d. How many of the requests on which your library appeared as a third choice were you able to fill?_____

15. From your statistics, how much time elapses from the day you send a request to PNBC until you receive the document requested? For the current calendar year, please give the following:

    a. In days, what is the least amount of time it took to obtain material requested through PNBC?

    b. What was the longest time required for filling a PNBC request?_____

    c. What is the average time?_____

    d. Do the above figures include requests sent or filled by mail only?_____ If not, please specify how many were handled by telephone and/or teletype:

    e. Do your statistics distinguish between requests filled by xerox copy and others? If so, please give average time for filling a Xerox request to PNBC:_____

    f. Average time for a book request from PNBC:_____

16. How many (and what percentage) of the requests you sent to PNBC this year were not filled?_____ Of these did you receive useful reports or recommendations for any (e.g., suggested State Library purchase, suggestions of libraries to contact directly)?

17. Of those requests filled through PNBC, how many were filled by libraries outside the Northwest Region?_____

18. Does your library presently report its acquisitions to PNBC?_____
If so, how long has it been doing so?_____

a. Did PNBC originally receive your complete catalog?_____

b. If not, which of your holdings have been reported?_____

c. Which ones have not?_____

19. Does your library publish a serials holdings list, or contribute to a union list of serials holdings?_____

If so, please give title of list:_____

20. If the catalogs of major reserach libraries in the Northwest were available on microfilm at a cost within your budget, would you be interested in acquiring them?_____

21. Does your library have microform readers that are available for users?_____

Please indicate which and number of the following you have:

a. microfilm readers_____

b. microfilm reader/printers_____

c. microfiche readers_____

d. microfiche reader/printers_____

e. Readex microcard readers_____

f. Other (please specify):_____

22. Does your library offer photocopying services?_____

a. If so, do you have:

1. a xerox copying machine?_____

2. other (specify)_____

b. What is the per page charge for photocopying?_____

Exhibit A-7

PNBC Reporting...

Date: _____

Subject: Building Resources in the Pacific Northwest

Background: Among the concerns of the library community is the number of titles of general interest which are unobtainable from the libraries of the Region. PNBC's Board of Directors feels that the knowledge which PNBC acquires through its searches regarding informational gaps should be shared with the participating state libraries, who in turn can make decisions as to how these gaps might be filled. This tentative report form has been devised as a means of letting the libraries know where these gaps occur in order that the requesting libraries may receive the information they need as rapidly as possible.

Report on: PNBC transaction number: _____

Author of Requested Title: _____

Title of Requested Material: _____

Publisher: _____ Date: _____

Additional Information found by PNBC: _____

_____

This is a suggestion that this title be purchased by:

_____Alaska State Library
_____Idaho State Library
_____Montana State Library
_____Oregon State Library
_____Washington State Library

This is an informational copy to:

_____Alaska State Library
_____Idaho State Library
_____Montana State Library
_____Oregon State Library
_____Washington State Library

Other library: _____

****

Identical copy of this report is being sent to the requesting library:

_____ on _____ (date)

****

STATE LIBRARY REPORT TO REQUESTING LIBRARY

____State Library will purchase; reserve is filed for requesting library

____State Library will purchase; file a new request about _____ (date)

____State Library has decided NOT to purchase

____State Library suggests that it would be more appropriate for requesting library to purchase

____State Library suggests that title should be borrowed from outside the Region

____State Library suggests that since this title is so new we should wait to see if some library within the Region purchases later; suggests PNBC hold the request for _____ months to see if any library does purchase.

Form 72-6

95

SALARIES and BENEFITS

PNBC -- Projected Costs -- FY 1973

ITEM	SUB-TOTAL	TOTAL
DIRECT WAGES for filing cards	19,882[1]	
DIRECT WAGES for processing, ILL requests	111,878[2]	
DIRECT WAGES for Mansell Project (Photocopying 200,000 cards	2,157	
Salaries for Administration and Supervision	22,314	
Salary Increase, 3% (.03 x 156,231)	4,687	
TOTAL SALARIES		160,918
Benefits at level of FY 1972 (11.06% of Salaries)	17,798	
Benefits Increase, 1% (.01 x 160,918)	1,609	
TOTAL BENEFITS		$ 19,407

1 Based on estimate of 500,000 cards to be filed
2 Based on estimate of 50,273 requests to be received

FY 1972 (Actual) -- FY 1973 (Projected)

Item	Budgeted FY 1972[1]	Projected Costs FY 1973
Salaries	$129,080.95	$160,918
Benefits	9,970.00	19,407
Consultant Fees	2,780.00	---
Travel	3,000.00	3,000
Supplies	5,127.83	7,950
Telephone	1,200.00	1,200
Teletype	4,500.00	4,500
Postage	3,000.00	4,750
Printing	750.00	1,200
Photocopy	6,546.17	4,500
Repairs & Maintenance	500.00	600
Legal & Accounting	2,800.00	2,800
Taxes & Licenses	700.00	700
Miscellaneous	206.00	250
Furniture & Equipment	11,196.09	1,000
Books & Library Materials	2,610.57	1,000
Catalog Expansion	8,469.15	---
TOTAL	192,436.76	213,775
Univ. of Wash. Services		
Building Space (Rent, Utilities, etc. $5.75 per sq. ft.)	---	16,848
Payroll, Audit, Mail Service, etc. (@ 4.96% of salaries & benefits)	---	8,950
GRAND TOTAL		$239,573

1 Includes funds from grants by Montana State Library, Washington State Library, U.S. Office of Education